VOCATIONAL EDUCATION STATUS REPORT UPDATE

December 2003

Draft for AWIB Comment

Introduction

By Resolution 02-07, the Alaska Workforce Investment Board (AWIB) has requested an update of the *1997 Status Report: Vocational Education in Alaska*. The RFP soliciting proposals for the work effort stated that

> The contractor will conduct research, compile information, synthesize and analyze the information, and produce a report detailing the current status of vocational technical education in the State of Alaska. The methodologies to be used will include research of available sources of data, such as records available at the Department of Education and Early Development, school districts, the University of Alaska, and educational institutions and agencies, surveys, and interviews with educators, program directors, and administrators.

The RFP goes on to say that the data and information collected will at the least comprise a one year snapshot of vocational education in Alaska and will, where feasible, compare this present snap shot with that detailed in the 1997 report. This study is an attempt to take that current snapshot and to make comparisons with a six-year old picture.

To compile the information and data used in this report, Madden Associates with the assistance of SERRC utilized all of the methodologies outlined in the RFP. A list of people interviewed and documents reviewed is contained in the appendices. As with the 1997 study, the researchers found that the topic of the status and future of vocational education in Alaska is of high concern to many people, all of whom shared their views openly and frankly. This snapshot seeks to capture not only the dry facts about programs and institutions but also the hopes and concerns of a variety stakeholders.

The report is organized in the following four sections.

Section I: Today's Landscape

In many ways, the current snapshot is taking a picture of an almost totally different landscape than the 1997 report. This section describes in some detail how the landscape of and surrounding vocational education in Alaska has changed in the six years since the first status report.

Section II: Different Landscape, Different Results?

If the landscape differs so dramatically from the past—and it does—what can we say about results? Are there significant differences in the numbers and types of programs being offered now? Are there significant differences in numbers and types of students? And, is there a difference in quality? This section of the report looks at these questions and provides the most recent data available in an effort to elicit answers.

Section III: The Landscape of the Future

Based on the comparisons of the two snapshots, what trends can be teased out which might give a hint to the future. If today's landscape is so radically different from just a short time ago, do the trends suggest that this rate of change will continue? This section describes what the Alaskan vocational education landscape might look like in 2010.

Section IV: Do We Want to Go There?

Although there are many positive trends in vocational education and workforce training, there are also some that are negative. This final section makes some recommendation as to how stakeholders can encourage the positive and help alleviate the potential negative features of landscape indicated by today's trends.

Section I: The Landscape

The 1997 snapshot captured a system poised for significant change on many levels and in many aspects. On the national scene, the newly-enacted Welfare Reform Act had highlighted the importance of transition from training to immediate employment. Negations were underway for the reauthorization of the Carl Perkins Act ("Perkins II") and the Job Training Partnership Act (JTPA).

At the state level, the Alaska Quality School Initiative was focusing attention on academic skill standards and was moving to develop a high school exit exam. State financial woes had resulted in almost a decade of relatively flat funding, in real dollars, for the Alaska School Foundation Program—the state's main vehicle for funding K-12 public education—and of a significant decline in state support for the university system. At the time of the 1997 report, plans were afoot for significant revisions in funding for categorical K-12 programs such as vocational and special education.

As these factors played themselves out during the ensuing years, the individual and combined effects have had a powerful impact on the Alaska's vocational education system. A first effect has been for the system itself to be renamed—as career and technical education at the secondary and postsecondary institutional level and as workforce development in general. However, because this report seeks to parallel the earlier report, the system will be referred to as "vocational education" throughout.

In general, the forces shaping the current system can be described under these headings:

A. Quality and Standards
B. Accountability and Performance Measures
C. Consolidation and Coordination
D. Cooperation and Collaboration

Each of these forces has a national and a state dimension and is described in some detail below.

A. Quality and Standards

1. National Level

The school improvement movement has had a profound impact on the federal structure supporting general and vocational education. Starting with the reauthorization of the Carl Perkins Act in 1998 (Perkins III) and continuing in the No Child Left Behind (NCLB) legislation, the federal government has shifted its attention from access—the public policy informing earlier Perkins acts as well as the Elementary and Secondary Education Act—to skill attainment and academic achievement.

For example, Perkins III removed most set asides for special populations but vastly increased the emphasis on improving the "academic and technical skills of students…and ensuring learning in core academics"[1] as well as technical and vocational subjects. In this aspect, the national effort echoes one of the recommendations of the 1997 status report:

> **1997 Recommendation**: The state should support the reauthorization of the federal Carl Perkins Act, preferably along lines which would encourage reform initiatives. This implies that the current Perkins emphasis on special populations be lessened in favor of comprehensive, integrated program planning for all students.

In order to foster this quality improvement, Perkins III requires participating states to describe and report on how the state will

- improve academic and technical skills of participating students, including through integration of academic and vocational education and
- ensure that participating students are taught the same challenging academic proficiencies as other students.

Current administration proposals for the reauthorization of Perkins III indicate even more intense pressure for improvement of academic skills at the secondary level. In fact, the backup information for the original proposal—the Secondary and Technical Excellence Education Act of 2003—would channel current federal secondary vocational funding to academic programs and increase vocational funding to the community college level.

[1] The Official Guide to the Perkins Act of 1998, p. 44

While it is unlikely that the act will pass as proposed, it is almost certain that a new Perkins will continue the emphasis on improving the quality of the academic program.

NCLB ups the quality ante even more substantially with its requirements for "highly qualified" teachers, paraprofessionals and administrators. Although these requirements do not apply to vocational education as yet, they do have implications for the state of Alaska, as described below. In addition, as Perkins III faces reauthorization in the coming months, it is quite possible that similar faculty requirements will be considered for vocational/technical programs.

2. State Level

State attention to educational quality and standards has been underway since the early 1990's. Although it began as an indigenous effort, the Alaska Quality Schools movement has been reinforced and reshaped by national efforts.

From the point of view of vocational education, one of the most significant changes in the past six years has been the adoption of a common set of career clusters and the development of standards for each cluster.[2] These activities address one of the recommendations of the 1997 report:

> **1997 Recommendation**: A commonly-accepted set of career clusters should be adopted covering occupational areas in demand or projected to be in demand by the Alaska labor market as emerging/growth occupations, new hires in existing occupations or replacements of non-resident hires. Student performance standards, which integrate academic, employability, career development and occupational-specific skills, should then be developed and adopted for these clusters.

The 16 clusters are groupings of occupations and broad industries based on commonalities. The clusters are the result of national efforts and are common among the states. They "identify pathways from secondary school to two- and four-year colleges, graduate schools and the workplace," according to the National Association of State Directors of Career technical Education Consortium. The clusters, which are used to display most of the statistics found in this report, are shown in the following table.

Table 1
Career Clusters

Agriculture, Food and Natural Resources	Architecture and Construction	Arts, A/V and Communications	Business Management and Administration
Education and Training	Finance	Government and Public Administration	Health Science

[2] To date, only 9 of the 16 have standards. However, work continues on standard development. Current standards can be accessed through the Department of Education and Early Development Career and Technical Education website at http://www.eed.state.ak.us/tls/CTE

Hospitality and Tourism	Human Services	Information technology	Law, Public Safety and Security
Manufacturing	Marketing, Sales and Service	Science, Technology, Engineering and Mathematics	Transportation, Distribution and Logistics

These clusters and standards form the basis for the approval of local secondary vocational education programs. Alaska also has established extensive content standards for the major academic subjects that are to be implemented in local school district curricula.

The State of Alaska has adopted the Perkins III criteria that approved programs must be "coherent and organized and offer a sequence of courses directly related to preparing individuals for paid or unpaid employment in current or emerging occupations requiring other than a baccalaureate or advanced degree"[3] While this definition has not changed much from the past, what has changed is the emphasis on "organized", "coherent" and "directly related to employment", as evidenced by alignment of local programs to standards. A complete example of how a program should be aligned to both vocational and academic state standards can be found on the Department of Education and Early Development (DEED) Career and Technical Education website. A single page example for Carpentry is found in the appendices to this report.

The State of Alaska has been increasingly concerned with application of standards and continuous improvement to the entire workforce development system. In response to legislative intent as established in SB 289 of the 2000 legislative session, the Alaska Workforce Investment Board (AWIB) adopted the *Alaska's Future Workforce Strategic Policies and Investment Blueprint.* The Blueprint serves as the comprehensive guide for alignment of public policies and resource investments in Early Childhood Education-12 and postsecondary vocational and technical education and training programs statewide[4].

The Blueprint establishes six guiding principles for the improvements of program quality, access and delivery:

- **Needs Driven**. System is labor market-driven, and responsive to interrelated workforce, community and regional economic development needs.
- **Accessible**. System is expanded to provide greater access and opportunity in both rural and urban Alaska.
- **Interconnected**. System uses coordinated programs and service delivery to promote progressive, lifelong occupational learning, skill transferability, credential portability, and worker mobility.
- **Accountable**. System delivers quality services that are aligned with and responsive to current and emerging needs of core constituents—students, job seekers, employers, families and communities.

[3] The Official Guide, p. 44
[4] Alaska's Future Workforce Strategic Policies and Investment Blueprint, p. 1

- **Collaborative Governance**. System promotes collaborative state and local policies and partnerships to ensure a close fit between education and training, labor market demands, and the needs of constituents regionally and statewide.
- **Sustainable**. System is "built to last" and supported by increased funding and sustainable investment policies.

The AWIB recently commissioned a review of the Blueprint to develop an instrument to measure the extent to which vocational education/training providers operate in accordance with the principles and strategies of the Blueprint. This movement from setting standards to measuring performance against these standards is indicative of the second major force operating to change the vocational education landscape: accountability.

B. Accountability and Performance Measures

1. National Level

As a direct outgrowth of the quality and standards movement, national attention over the past six years has turned from reporting input and throughput of programs—in terms of dollars allocated, programs offered and students served—to output and performance measures.

Again, Perkins III set the standard. Although earlier acts had required that state and local programs evaluate and report on progress, Perkins III made this requirement much more specific by directing states to

- Identify core indicators of performance
- Establish levels of performance for each core indicator
- Annually evaluate the effectiveness of local programs
- Report data relating to participating students in order to adequately measure the progress of such students
- Ensure that locally-reported data are complete, accurate and reliable.

1998 also saw the demise of the federal JTPA and its replacement by the comprehensive Workforce Investment Act (WIA). Among the principles guiding the new act was a greater accountability for program outcomes. The Act mandates state data collection and reporting on the following core indicators:

- Adults, Dislocated Workers and Youth 19 - 21
  - Placement of participants into unsubsidized employment
  - Retention six months after entry
  - Earnings six months after entry
  - Skill attainment as indicated by a recognized credential for educational or occupational skills for those who enter employment, college, the military or other placement
- Youth 14 – 18
  - Skill attainment of basic readiness or occupational skills

- High school diploma or equivalent
- Placement and retention in advanced education, training, military or job

Again, earlier acts had required program evaluation. What distinguishes the WIA is the specificity of outcomes measures.

Finally, NCLB carries federal accountability demands on states and local districts to a level undreamed of in the past by

- Mandating annual assessments in basic skills,
- Requiring that districts make "adequate yearly progress" on increasing the number of students who can achieve agreed-upon levels of basic skills attainment, and
- Insisting that assessment results are annually to parents and the public.

Both WIA and NCLB carry consequences for non-performing institutions and providers. Under WIA, grants funds can be denied to providers who do not meet or exceed benchmark performance levels. Schools who do not make adequate yearly progress under NCLB can loose their students to another, better performing school and must pay for the costs of transportation.

2. State Level

Again, state efforts in accountability and performance measures preceded national efforts, but have been influenced by them.

A major state performance measure to be introduced since the 1997 report is the High School Graduation Qualifying Exam (HSGQE), piloted in 2000 and initiated in 2001. Categorized as a "high stakes" exam, the HSGQE has lifelong implications for today's high school students, since students who cannot pass the exam at a determined level by the 12th grade will not be awarded a high school diploma.

According to many interviewed for this report, the HSGQE could also be a "high stakes" exam for vocational education. On the one hand, the test—with its emphasis on academic skill attainment—has already begun to shift the focus of secondary programs away from electives, such as most vocational education. On the other hand, although the 2003 results show a distinct improvement in the numbers of students who score at or above proficiency level, fully one third of students continue to test below proficiency in reading and math. This provides a window of opportunity for those vocational programs which can meet the state and national emphasis on offering a coherent sequence of courses to ensure learning in core academic as well as vocational and technical courses. This reinforces a recommendation of the 1997 report

> **1997 Recommendation**: Vocational educators must become actively involved in assisting schools to teach employability skills, integrate academic and practical learning, provide occupational-specific skill training and connect classrooms with the community.

This type of program should be particularly effective with those students whom the traditional academic program has failed to engage.

A second accountability and performance measures strand is the direct result of national efforts, although it had been considered in Alaska well before 1998. This strand deals with follow-up on participants in vocational education and workforce development programs. The 1997 report described several such efforts conducted by the Alaska Vocational Technical Education Center in Seward, the King Career Center in Anchorage and the University of Alaska system in conjunction with the Alaska Department of Labor. Based on these early efforts, the 1997 study made the following recommendation:

> **1997 Recommendation**: Performance of all public secondary and postsecondary programs should be measured periodically in terms of student post-training job placement; earnings; enrollment in certificate and degree programs; continuation to apprenticeship or other training programs; and other agreed-upon measures of success. Resources such as the Alaska Department of Labor wage and salary files should be utilized to assure comparability of results across programs and comparison groups.

Thanks to the accountability requirements of both Perkins III and the WIA, such a system is now in place. In fact, the current system goes beyond the 1997 recommendation in reporting on academic and vocational skill attainment as well as placement and retention measures. It also goes beyond the recommendation in including adult programs as well as private vocational education providers that wish to be eligible for funding under WIA. Since 1999, the Departments of Education/Early Development and of Labor and Workforce Development have tracked and published data on the core indicators spelled out in the federal legislation.

As a result of this attention to outcome statistics, reporting at the secondary and postsecondary level has become more refined and reliable. For example, enrollments for both school districts and the University of Alaska system are now unduplicated, giving a more accurate picture of the numbers benefiting from employment training programs at these levels. State Policy makers now begin to have a body of consistent information upon which to base funding decisions and future plans.[5]

The effects of the performance measures mandated by NCLB have yet to be felt. Clearly, the emphasis on assessing basic skill attainment will require that school districts direct additional resources to this task. If these resources come at the expense of vocational education programs—as many district directors anticipate—then the impact on secondary-level workforce training will be negative. If, as NCLB supporters insist, the act results in increased basic skill achievement on the part of all students, it could have long-term positive effects on Alaskan students' ability to successful engage in more rigorous and complex career and technical education programs.

[5] See Training Program Performance reports prepared by the Alaska DLWD, Research and Analysis Section for annual information on these measures.

C. Consolidation and Coordination

A third feature of the national and state landscape is the movement toward consolidation and coordination of programs and funding. For the purposes of this report, the following distinction is made between the terms "consolidation", "coordination","cooperation" and "collaboration". Consolidation is the statutory or administrative combination of previously independent programs, agencies or funding. Coordination is also often administratively mandated and usually requires agencies or programs to engage in joint planning or other activity, while retaining their independence. Cooperation and collaboration are more grass roots efforts where individuals join together to achieve a mutually-established goal or provide a mutually-agreed upon service. Consolidation and coordination can be coercive; cooperation and collaboration are almost always voluntary.

1. National Level

The 1998 Workforce Investment Act is the prime example at the federal level of this consolidation/coordination emphasis. WIA incorporates a variety of earlier programs under a single umbrella, including the adult, dislocated worker and youth programs formally funded under JTPA, Adult Education and Literacy, Wagner-Peyser Act programs and Vocational Rehabilitation.

A key ingredient of WIA is the "one stop" system that requires a host federal programs to join as partners in one-stop career centers that provide a consolidated set of "core services" to anyone using the center. Core services include outreach, intake and orientation, initial assessment, job search and placement, labor market information, performance and cost information on providers, information on filing for Unemployment Insurance and determination of eligibility for specific services.

WIA consolidates several major programs and funding sources; it also requires cooperation among many others. For example, the Unified State Plan under WIA must address the following programs, in addition to those covered by WIA itself:

- Perkins III Secondary, Postsecondary and Tech Prep
- Food Stamp Employment and Training Program
- Trade Act Programs
- Veterans Programs, including Veterans Employment and the Disabled Veterans Outreach Program
- Unemployment Insurance Programs
- Temporary Assistance for Needy Families
- Senior Community Service Employment Program
- Community Development Block Grants
- Community Services Block Grants

The new act also established Workforce Investment Boards charged with directing and overseeing a coordinated system of workforce development.

Program consolidation at the federal level was further increased with the enactment of NCLB, which provides states the option of applying for multiple Elementary and Secondary Education Act program funds through a single consolidated application. OMB Circular 1810-0576 states that

> Although a central, practical purpose of the Consolidated State Application is to reduce "red tape" and burden on States, the Consolidated Application is also intended to have the important pedagogical purpose of encouraging the integration of State, local, and ESEA programs in comprehensive planning and service delivery and enhancing the likelihood that the SEA will coordinate planning and service delivery across multiple State and local programs.[6]

Clearly, the consolidation drive at the federal level is gaining strength.

2. State Level

Following the national lead, the State of Alaska moved to consolidate its workforce development efforts. House Bill 40, passed during the 1999 legislative session, abolished one department (Community and Regional Affairs) and transferred its programs to other agencies. Programs related to workforce development were consolidated into the Department of Labor, which was consequently renamed the Department of Labor and Workforce Development (DLWB). That same year, Executive Order 182 designated the Alaska Human Resource Investment Council (AHRIC) as the state workforce investment board, replacing the Alaska Jobs Training Council, the Governor's Council on Vocational and Career Education and the Employment Security Advisory Council. The board was to serve as the state's primary planning and coordinating entity for vocational and technical education.

SB 289 of the 2000 legislative session established AWIB (then AHRIC) as state's primary planning and coordinating agency for vocational and technical education and charged it with

> facilitating the development of a statewide policy for coordinated and effective technical and vocational education in this state and, to the extent authorized by federal and state law, plan and coordinate federal, state and local efforts in technical and vocational education programs.[7]

Under this statute, AWIB took control over most training programs, with the exception of Perkins III Secondary, which remains by state law under the purview of the State Board of Education.

Further consolidation of programs occurred this past (2003) legislative session when the Alaska Technical Center(ATC) at Kotzebue and the Alaska Vocational and Technical Education Center (AVTEC) at Seward were transferred from the Department of

[6] A copy of the circular can be found at <www.eed.state.ak.us/nclb/pdf/AKConApp.pdf>
[7] AS23.17.820 (2)

Education and Early Development to the Department of Labor and Workforce Development, placing them under the direction and purview of the Alaska Workforce Investment Board.

An additional form of consolidation that impacts the vocational education system has taken place at the state level: consolidation of funding. At the time of the 1997 report, a revision to the Alaska State Foundation Program had been introduced by the Governor at the request of the State Board of Education to consolidate the then-existing categorical funding for four separate programs (vocational, bilingual, gifted and talented and special education) into one block allocation. Although the proposal did not pass that session, it was taken up again and passed the following session. Senate Bill 36 established a "special needs and intensive services" funding component of the Foundation Program, set at 20% of the district's basic school funding, to assist districts in providing these specialized programs.

The 1997 report outlines the concerns of vocational educators at the time:

> …vocational educators fear, with some reason, that once the link is broken between approved vocational courses and the generation of additional funds, local districts will reduce an already declining fiscal commitment to vocational education.[8]

As will be seen in the statistical section of this report, hard data proving or disproving the validity of this concern is unavailable. However, the additional demands placed on the K-12 system through the various school improvement and performance measurement initiatives, as well as the increasing costs of special education, give some credence to earlier fears.

D. Cooperation and Collaboration

A final movement shaping the contours of the vocational education landscape is the opportunities for increased cooperation and collaboration among programs and agencies.

1. National Level

WIA requires increased and much more substantial cooperation between government agencies and business and industry partners. The Workforce Investment Boards are to be led by industry and are charged with aligning training efforts for the participants with the needs of the business community. A brochure on WIA published by the Alaska Hi-Tech Business Council contends that

> for the first time, under the Workforce Investment Act of 1998, business and industry have the opportunity to leverage decades of experience with a wide range of federally-funded programs that contribute to the nation's labor pool.[9]

[8] 1997 Status Report, Vocational Education in Alaska, p. 87
[9] The ABC's of WIA, p. 21

2. State Level

In Alaska, too, there appears to be a new era of cooperation and collaboration. Spurred partly by national legislation, but fed also by the twin state conditions of declining resources and expanding needs, public and private sector organizations, agencies, programs and individuals increasingly turn to each other for support.

At least three types of cooperation/collaboration in workforce development have emerged or strengthened since the 1997 report:

- Public And Private Sector
- Training Providers
- Educational Institutions

a) Public and Private Sector

Starting with the Alaska Workforce Investment Board itself, which has a majority (54%) of members from the private sector, the involvement of business and industry in vocational education and training appears to be at an all time high. AWIB organizationally is housed in a new division at the Department of Labor and Workforce Development, the Division of Business Partnerships, which mirrors this new relationship.

Another public/private partnership phenomenon is the creation of career consortia in the various economic sector. These consortia are dedicated, in the words of a brochure for the Alaska Process Industry Career Consortium, to

> providing training programs and employment avenues that enable Alaskans to obtain the skills required to enter and stay current with the rapid changes in …industry across the state[10].

Membership in these consortia includes people from industry, education, labor and the community at large.

In addition to the process industry (Manufacturing), career consortia exist in the following occupational cluster areas:

Table 2:
Career Consortia by Cluster

Career Cluster	Career Consortium
Information Technology	Alaska High Tech Council
Hospitality and Tourism	Alaska Hospitality Alliance
Health	Alaska State Hospital and Nursing Home Association (ASHNA)

[10] Informational brochure by the Alaska Process Industry Career Consortium

Architecture and Construction	Alaska Works Partnership Associated General Contractors
Business Management and Administration	Alaska Business Education Compact

The first five of these consortia have come together under an umbrella organization, the Industry Skills Coalition (ISC), which represents the largest and emerging private sector employers in Alaska.

As stated on its web page[11], the ISC works

> in alignment and coordination with the Alaska's workforce investment system, including the Alaska Workforce Investment Board and the one stop delivery system known as the Alaska Job Center Network.

Each of these consortia are involved with educational institutions—school districts, the University of Alaska and private postsecondary institutions—in developing standards for training programs, advising on program content and assisting with placement of program completers. In addition, the consortia contribute funds and other resources to various training programs in the state. For example, ASHNA members pledged over one million dollars in cash and kind to the University of Alaska to enable it to expand its Anchorage-based associate degree in nursing to other parts of the state.

A second significant public private partnership that has matured greatly since 1997 is that between business/industry and the University of Alaska system. Under the direction of a new president, Mark Hamilton, the university has made a strong commitment to act as an engine of economic growth for the state. Under this rubric, the University has reaffirmed its community college mission, expanded its vocational and technical training programs, and established a Corporate College.

In its recently-adopted strategic plan, the Board of Regents selected "emphasizing the community college mission" as one of its primary areas of focus, with the specific objectives of

- Increasing the number of programs, course sections, and scheduling options in the areas of vocational/technical training, community interest, and professional workforce development.
- Increasing partnerships with high schools in vocational/technical fields[12].

This reaffirmation of the community college mission has been long desired by those involved in Alaska's workforce development, many of whom believed that with the 1987 reorganization of the university system, the University of Alaska has opted out of its training responsibilities. The move by the Board of Regents also addresses a recommendation of the 1997 report:

[11] www.akisc.com

[12] The University of Alaska System Strategic Plan 2009: Building Higher Education For Alaska's Golden Anniversary, p. 6

> **1997 Recommendation**: Governing boards of school districts and the University system must recognize the value of vocational education in meeting school improvement goals. Commitment to quality vocational training should be a part of each institution's mission statement.

Over the past four years, the university leadership has been successful in securing additional state funding, much of which has gone to expand existing or develop new program directed at Alaska's workforce needs. For example, the University of Alaska at Anchorage has developed a program in logistics to respond to major changes in the transportation and distribution field. The program offers certificates, bachelor and master's degrees in this rapidly-growing area.

All three major campuses of the University system (MAUs) have expanded their information technology and business programs, including certificates and degrees in networking, computer program applications and e-business. Health programs, including nursing through the associate degree level, are being offered at several locations, including Fairbanks, Juneau, Ketchikan, Sitka and Kodiak. Other health-related programs are being delivered throughout rural Alaska via distance.

The Corporate College was created to serve the training and education needs of business and industry. It acts as a single point of contact through which the private sector can access the resources of the university system, including new programs and courses customized to an organization's business objectives.

That the university has been successful in strengthening its ties with business and industry is evidenced by a recent report *The University of Alaska: The Key to Alaska's Future, the Time for ALL to Invest*, by Commonwealth North. The report found that while the U of A mission of providing community college programming in addition to typical university level programs and services represents "additional challenges for the faculty and administration…the University has successfully made the offerings seamless to the students".[13]

The report goes on to recommend an increase in state appropriations to the system, a recommendation that would not be possible without broad support from the business community.

Public private partnerships are occurring frequently at other levels of education. For example, the Association for General Contractors of Alaska (AGC) works with various urban and rural school districts, including Anchorage, Mat-Su, Metlakatla, Bering Straits and Lower Kuskokwim. Alaska Works Partnership's Rural Career Path Pilot Project involved five community campuses of the university system with 11 school districts and four regional technical centers, including two operated through Alaska Native tribal funding.

[13]The University of Alaska: The Key to Alaska's Future, the Time for ALL to Invest, no page numbers

While these kinds of partnerships have been operating in vocational education for many years, there appears to be a new energy and commitment. These projects, however, are dependent in many cases on outside funding. Where local school district funds are used, projects are being scaled back or even defunded. A 2003 status report on the educational program of the Association of General Contractors (AGC) of Alaska stated that "our star district last year, who was doing so much for us, cut positions and funding for vocational education. Hence we are stalled out with them—for now".[14]

A third coordination effort new since the last report is the Denali Commission, introduced by Congress in 1998. As described on its website,

> the Denali Commission is an innovative federal-state partnership designed to provide critical utilities, infrastructure, and economic support throughout Alaska. With the creation of the Denali Commission, Congress acknowledged the need for increased inter-agency cooperation and focus on Alaska's remote communities.[15]

The Commission Board—which is composed of representatives from state and federal government, the university system, labor, Alaska Natives and Alaskan communities—exemplifies partnerships between federal and state agencies and the private sector. Since its inception, the Commission has promoted numerous cost-shared infrastructure projects across the State.

b) Training Providers

Today's landscape features increased cooperation and collaboration among agencies and organizations responsible for delivering vocational education and training. A major force for this effort has been the Workforce Investment Act, particularly with its mandate of "one-stop" centers. But other collaborative efforts are also underway. Two prime examples are the Alaska Native Coalition on Employment and Training (ANCET) and the Vocational Technical Education Providers (VTEP).

ANCET has been operating since 1982, but formally incorporated in 2002 to represent Alaska Native corporations and tribes throughout the state. ANECT Directors, who are also members of various other public and private workforce development boards and commissions, can provide a global perspective on education, employment, training and economic development issues and concerns specific to Native people[16].

Although federal workforce development funds have been allocated directly to Alaska Native organizations since the 1973 Comprehensive Employment and Training Act (CETA), recent years have seen a substantial increase in both sources and amounts of funds so allocated, including the Indian Self Determination Act (BIA training funding) and WIA. Since the late 1990's, the Denali Commission Denali Training Fund has been

[14] Education Status Report for ACG of Alaska Board of Directors, January 16, 2003, p. 2
[15] www.denali.gov/Legislation.cfm?Section=DC_Purpose
[16] www.ancet.org

a significant source of support. ANCET's role in fostering cooperative and collaborative efforts through these various funding sources is becoming increasingly important.

A second, less formal, organization promoting cooperation in workforce development efforts is the Vocational Technical Education Providers (VTEP), founded in 2002. This volunteer organization seeks to generate a statewide system for delivery of services that

- Implements the AWIB Blueprint,
- Avoids unnecessary duplication in close geographical areas.
- Meets industry and academic standards.
- Assists business education partnerships.
- Focuses on excellence and school improvement.
- Reports on progress and accountability.
- Supports career pathways for Alaskan careers.
- Expands the registered apprenticeship system to new occupations[17].

The group currently has over 100 members, representing public, private and labor training. Currently supported by a grant from AWIB, it is hoped that the effort will persists beyond the grant period.

c) Educational Institutions

The VETP described above involves representatives from various educational agencies—including school districts, the university system and vocational centers—and is indicative of a growing movement toward cooperation and collaboration among these entities. This tendency is evidenced in at least two significant ways: the increased attention to Tech Prep and K-12/university articulation and distance education.

Tech prep or 2+2 programs have existed in Alaska for many years. However, the new emphasis on the community college mission within the university system has begun to revitalize these programs. As will be reported in the statistical section of this study, the University of Alaska Anchorage has thriving partnerships with several secondary programs. UAF Tanana Campus and the various UAS campuses are also increasing their collaboration with local districts. The three MAUs are close to agreeing on a common template for K-12 articulation agreements that will go far in standardizing these activities.

Another good example of new cooperative relations between educational institutions is Alaska House, a program whereby Chugach School District can expose its students to career planning and vocational training opportunities not available locally through agreements with secondary and postsecondary programs and employers in Anchorage.

[17] Alaska Vocational Technical Education Providers Report, Executive Summary, p. 1

Distance education or distributed delivery of vocational education programs also calls for greater collaboration and cooperation between educational entities and between various units within organizations.

For example, the UA Strategic Plan calls for improved collaboration among campuses by 1) developing additional degree programs that rely on content from the several campuses and 2) erasing technology barriers to communicating and sharing content between campuses and beyond campuses. The UA system has already developed several certificates and degrees that involve faculty from various campuses in distance delivery, the most prominent of which are in early childhood education and computer information and office systems. Currently, the system is planning a suite of health-related occupational training programs using a similar delivery strategy. Other vocational programs—such as those in business administration, environmental technology, nursing and health information management—utilize faculty from one campus to serve the entire system.

However, not all is unfamiliar to the reader of the 1997 report. Within the shifting landscape described above, some points of reference have remained constant over the past six years. Several of these common reference points deal with the Alaskan economy, which retains the following general characteristics:

- a continued restructuring away from resource extraction and processing
- an aging workforce
- a reliance on out of state workers.

Overall, the general outlook for the Alaskan economy today differs little from that expected in 1997.

A second reference point is the state's fiscal picture which remains as dim today as in 1997. One financial bright spot for vocational education in the past six years was the passage of Senate Bill 289 in the 2000 legislative session which, among other things, set up an Alaska Technical and Vocational Education Program Account funded with a potion of Unemployment Insurance contributions. About one-half of the first year's funding went to the University of Alaska, 32 percent to AVTEC and 16 percent to ATC. Thereafter, funds are to be awarded through a competitive grant cycle administered by AWIB.

The forces described above have combined to form a landscape in which today's vocational education and training programs operate. They most likely will continue to influence the direction of workforce training in the state as will be considered in more detail under Section III. Before looking at the future, however, it is helpful to examine the data available concerning the current status of vocational programs. This forms the content of the following section of this study.

Section II – Different Landscape, Different Results?

If the present landscape differs so dramatically from the past, what can we say about results? Are there significant differences in the numbers and types of programs being offered now? Are there significant differences in numbers and types of students? And, is there a difference in quality?

The RFP for this projects requested information about current program coverage, participation rates and expenditures and asked that current data be compared, where possible, with 1997. Although current data is available for all the requested dimensions, the changes described above have made it difficult, if not impossible to compare data over time.

For example, Alaska school districts and the University of Alaska system currently report unduplicated student enrollments by program, whereas in the 1997 report, enrollment was by class, giving a distorted picture of numbers involved.

The FY99 adjustments made to the Alaska School Foundation Program formula removed the necessity for school districts to report on expenditures for vocational education. As a result, the only information on district expenditures is the Perkins money received, which is intended only for program improvement and represents only a small fraction of actual expenditures.

Several other differences exist in the data of the two reports. Both the 1997 and this study aggregate data by economic regions used by the Alaska DLWD. In 1997, there were six regions; today there are seven. The new region—Western—has been split out from the Southwest region. In addition, Kodiak, which was in the Gulf Coast region in 1997, has been moved to Southwest. For the reader's convenience in conceptualizing these regions, a listing of school districts by current region is displayed on the following page.

School Districts by Region

Anchorage	Gulf Coast	Interior	Northern	Southeast	Southwest	Western
Anchorage	Chugach	Alaska Gateway	Bering Straits	Annette	Aleutian East	Kashinamiut
Mat-Su	Copper River	Delta/Greely	Nome	Chatham	Aleutian Region	Lower Kuskokwim
	Cordova	Denali	North Slope	Craig	Bristol Bay	Lower Yukon
	Kenai	Fairbanks	NW Arctic	Haines	Dillingham	St. Mary's
	Valdez	Galena		Hoonah	Kodiak	Yupiit
		Iditorod		Hydaburg	Lake and Pen	
		Kuspuk		Juneau	Pribilofs	
		Nenana		Kake	Southwest	
		Tanana City		Ketchikan	Unalaska	
		Yukon Flats		Klawock		
		Yukon Koyukuk		Mt. Edgecumbe		
				Pelican		
				Petersburg		
				Sitka		
				Skagway		
				Southeast Is.		
				Wrangell		
				Yakutat		

A second difference relates to the way in which programs are grouped. The 1997 study utilized the Classification of Instructional Programs issued by the Alaska Department of Education. Today, programs are grouped according to nationally-consistent career clusters. A comparison of these two systems is shown in the following table:

Table 3
1997 and 2003
Classification Systems

1997 Classification	2003 Career Cluster
Natural Resources/Agriculture	Agriculture, Food and Natural Resources
Business and Management	Business, Management and Administration
Business and Office	Subsumed in above cluster
Marketing	Marketing, Sales and Service
Family/Consumer Science	Human Services
Industrial Education	Architecture and Construction Manufacturing Transportation
Allied Health	Health Science
Applied Academics	Science, Technology, Engineering and Mathematics
Work Experience	
	Arts, A/V Technologies and Communication
	Education and Training
	Finance
	Hospitality
	Information Technology
	Law, Public Safety and Security
	Government and Public Administration

Readers who desire more specific information as to what program areas fall under each career cluster are encouraged to visit the DOE Career and Technical Information website at www.eed.state.ak.us/tls/CTE and follow the links to the Career Cluster crosswalks.

Within these constraints, however, it is possible not only to describe today's situation but to make limited statements as to whether the situation has improved or deteriorated since the earlier report.

A. Program Coverage

Data on programs was collected from a variety of sources, including interviews, concerning programs offered by school districts, campuses of the university system, the state's career and technical centers, private postsecondary institutions and labor unions. The following pages provide a listing of institutions and organizations offering training in each region by the career cluster.

While every effort was made to be as comprehensive as possible, no doubt some organizations, particularly private institutions, may have been overlooked. The private

institutions that are listed include all those that are recognized by the Alaska Commission on Postsecondary Education as well as those certified as Eligible Training Providers by the Alaska DLWD. Because some agencies may be recognized by the Postsecondary Commission but not by the DLWD, the following charts will not necessarily match any exiting list.

Because of space limitations, school district and University of Alaska programs are listed only by cluster. A breakdown of the specific vocational programs offered under each cluster and by degree level for the university programs is found in the appendices.

Overall coverage of training programs continues to be good and has improved over the 1997 situation with the development of several new training centers—such as the Galena School District's secondary and adult programs—and the increased programming offered by the University of Alaska community campuses. These developments, as well as an increasing use of distance delivery which will be discussed in Section III of this study, have brought training opportunities to rural Alaska that did not exist earlier. However, as the following pages indicate, most training continues to be located in urban centers which provide greater economies of scale.

Anchorage/Mat Su Region

Agricultural & Natural Resources	Architecture & Construction	Arts, A/V Technology & Commun	Business & Adminis-tration	Education & Training	Finance	Government	Health Services	Hospitality & Tourism	Human Services	Information Technology	Law & Public Safety
School Districts											
	Anchorage	Anchorage	Anchorage				Anchorage	Anchorage	Anchorage	Anchorage	
Mat-Su	Mat-Su	Mat-Su	Mat-Su	Mat-Su	Mat-Su		Mat-Su	Mat-Su	Mat-Su	Mat-Su	Mat-Su
University of Alaska											
UAA Mat-Su	UAA Anchorage		UAA Anchorage	UAA Anchorage		UAA Anchorage	UAA Anchorage	UAA Anchorage		UAA Anchorage	UAA Anchorage
	UAA Mat-Su		UAA Mat-Su				UAA Mat-Su			UAA Mat-Su	UAA Mat-Su
Other											
National Outdoor Leadership School	ABC of Alaska	Alaska School of Taxidermy	Alaska Inventor and Entrepreneurs Association	Alaska Pacific University	Wayland Baptist College		Alaska Learning Institute		Oriental Healing Arts School of Massage Therapy	Alaska Computer Essentials*	
	Alaska Ironworkers		Becker Conviser Professional Review		Alaska Pacific University		Career Academy		Metroasis Advanced Training Center	Alaska Technical Training	
	Alaska Joint Electrical Apprenticeship & Training		Wayland Baptist College				Chugiak Senior Center		A Head of Time Design Academy	Charter College	
	Alaska Laborer's Training Trust		Alaska Pacific University				Dental Careers Foundation		Academy of Hair Design*	Compusa (CompUSA)	
	Alaska Operating Engineers Apprentice Training Trust		Charter College				Job Ready		Ariel's Hair Design School	DCS Learning Center	

Agricultural & Natural Resources	Architecture & Construction	Arts, A/V Technology & Commun	Business & Adminis-tration	Education & Training	Finance	Government	Health Services	Hospitality & Tourism	Human Services	Information Technology	Law & Public Safety
Other (con't)											
	Alaska Trowel Trades						NorthStar Emergency Medical Academy		Double Header Beauty-Barber Training Center	MILA Administrative Services, Inc.	
	Alaska Works						Regional Alcohol & Drug Abuse Counselor Training*		Trend Setters School of Beauty	Network Business Systems	
	Center for Employment Education GeoNorth Heat & Frost Insulators & Asbestos Workers Local 97 IUBAC Le I Bricklayers & Craftsman Testing Institute of Alaska						Health TV Channel Inc.		Cimarron Tech		

Anchorage/Mat-Su Region (Con't)

Manufacturing	Retail/ Wholesale Sales & Services	Scientific Research/ Engineering	Transportation Distribution & Logistics
School Districts			
Anchorage	Anchorage	Anchorage	Anchorage
Mat-Su	Mat-Su	Mat-Su	Mat-Su
University of Alaska			
UAA Anchorage		UAA Anchorage	UAA Anchorage
		UAA Mat-Su	UAA Mat-Su
Other			
		AGC Safety Inc.	Alaska's Nautical Training School
		Environmental Management Inc.	Aero Tech Flight Services
			FUGU Ltd. MultiSea
			Take Flight Alaska
			TechEd

Gulf Coast Region

Agricultural & Natural Resources	Architecture & Construction	Arts, A/V Technology & Communications	Business & Administration	Education & Training	Finance	Government	Health Services	Hospitality & Tourism	Human Services	Information Technology	Law & Public Safety	Manufacturing
School Districts												
	Copper River SD		Copper River SD							Copper River SD		Copper River SD
		Cordova SD					Kenai SD	Kenai SD	Cordova SD	Cordova SD		Cordova SD
	Kenai SD	Kenai SD	Kenai SD						Kenai SD	Kenai SD		Kenai SD
	Valdez SD		Valdez SD						Valdez SD	Valdez SD		Valdez SD
University of Alaska												
			UAA Kenai				UAA Kenai			UAA Kenai		UAA Kenai
UAA PWSCC		UAA PWSCC	UAA PWSCC	UAA PWSCC			UAA PWSCC					UAA PWSCC
Other												
Alaska Vocational Technical Center	Alaska Vocational Technical Center		Alaska Vocational Technical Center				Alaska Vocational Technical Center	Alaska Vocational Technical Center	New Frontier Vocational-Technical Center	Alaska Vocational Technical Center		Alaska Vocational Technical Center
	Amundsen Educational Center		SEGO Consultants				Wilderness Medicine Institute	Indian Valley International				Northern Industrial Training

Gulf Coast Region (Con't)

	Retail/ Wholesale Sales & Services	Scientific Research/ Engineering	Transportation Distribution & Logistics
School Districts		Kenai SD	Cordova SD Kenai SD Valdez SD
University of Alaska		UAA Kenai	
Other		Pacific Rim Institution of Safety & Managementt	Alaska Vocational Technical Center

Interior Region

Agricultural & Natural Resources	Architecture & Construction	Arts, A/V Technology & Commun	Business & Adminis-tration	Education & Training	Finance	Government	Health Services	Hospitality & Tourism	Human Services	Information Technology	Law & Public Safety	Manufacturing
School Districts												
Delta/Greely	Alaska Gateway Delta/Greely Denali	Delta/Greely	Alaska Gateway Delta/Greely						Delta/Greely	Delta/Greely Denali		Alaska Gateway Delta/Greely
Fairbanks SD	Fairbanks SD Galena	Fairbanks SD Galena	Fairbanks SD		Fairbanks SD		Fairbanks SD	Fairbanks SD Galena	Fairbanks SD Galena Iditarod Area School District	Fairbanks SD		Fairbanks SD Galena
Kuspuk	Kuspuk Tanana	Kuspuk Nenana Tanana	Kuspuk Nenana				Kuspuk					Nenana
Y/K SD	Y/K SD	Y/K SD	Y/K SD Yukon Flats			Y/K SD			Y/K SD			Y/K SD Yukon Flats
University of Alaska												
UAF Interior		UAF Interior	UAF Interior	UAF Interior		UAF Interior	UAF Interior UAF Rural College		UAF Interior	UAF Interior		
UAF TVC	UAF TVC	UAF TVC	UAF TVC	UAF TVC			UAF TVC	UAF TVC	UAF TVC	UAF TVC	UAF TVC	
Other												
Delta Mine Training Center	Black Rapids Timber Training School							Galena SD Project ED. Residential School Post Secondary Adult Programs	School of Integrating Shiatsu Alaska	Wyatt Enterprises		

Interior Region (Con't)

Agricultural & Natural Resources	Architecture & Construction	Arts, A/V Technology & Commun	Business & Adminis-tration	Education & Training	Finance	Government	Health Services	Hospitality & Tourism	Human Services	Information Technology	Law & Public Safety	Manufacturing
Other												
	Center for Employment Education								Via Vita Health Project			
	Fairbanks Alaska Carpenter Training Center								New Concepts Beauty School			
	Fairbanks Area Plumber and Pipefitters								Galena SD Project ED. Residential School Post Secondary Adult Programs			
	Fairbanks Painting and Allied Trades											

Interior Region (Con't)

Retail/ Wholesale Sales & Services	Scientific Research/ Engineering	Transportation Distribution & Logistics
School Districts		
		Alaska Gateway
		Denali
	Fairbanks SD	Fairbanks SD
		Galena
Nenana		Nenana
		Y/K SD
University of Alaska		
	UAF TVC	UAF TVC
Other		
	Asbestos Removal Specialists of Alaska	Center for Employment Education
Retail/ Wholesale Sales & Services	Scientific Research/ Engineering	Transportation Distribution & Logistics
		Galena SD Project ED. Residential School Post Secondary Adult Programs
		Burgess Transportation Inc.
		Elmendorf Aero Club
		Fairbanks Flight Train

Northern Region

Agricultural & Natural Resources	Architecture & Construction	Arts, A/V Technology & Commun	Business & Administration	Education & Training	Finance	Government	Health Services	Hospitality & Tourism	Human Services	Information Technology	Law & Public Safety	Manufacturing
School Districts												
North Slope NW Arctic	North Slope Nome SD	North Slope NW Arctic	Bering Strait North Slope Nome SD NW Arctic	North Slope			North Slope		North Slope NW Arctic	North Slope NW Arctic		Bering Strait North Slope Nome SD NW Arctic
University of Alaska												
UAF Chukchi UAF Northwest		UAF Chukchi	UAF Chukchi UAF Northwest	UAF Chukchi UAF Northwest			UAF Chukchi UAF Northwest		UAF Chukchi UAF Northwest	UAF Chukchi UAF Northwest		
Other												
Alaska Technical Center	Ilisagvik College Alaska Technical Center		Ilisagvik College Alaska Technical Center				Alaska Technical Center			Ilisagvik College		

Northern Region (Con't)

Retail/ Wholesale Sales & Services	Scientific Research/ Engineering	Transportation Distribution & Logistics
School Districts		
		North Slope
		Nome SD
	NW Arctic	NW Arctic
University of Alaska		
		UAF Northwest
Other		
		Ilisagvik College
		Alaska Technical Center

Southeast Region

Agricultural & Natural Resources	Architecture & Construction	Arts, A/V Technology & Commun	Business & Administration	Education & Training	Finance	Government	Health Services	Hospitality & Tourism	Human Services	Information Technology	Law & Public Safety	Manufacturing
School Districts												
								Annette Island		Annette Island		Annette Island
	Chatham		Chatham									Chatham
			Craig									
		Haines	Haines						Haines	Haines		Haines
	Hoonah	Hoonah	Hoonah						Hoonah			Hoonah
Hydaburg								Hydaburg		Hydaburg		Hydaburg
	Juneau	Juneau	Juneau				Juneau	Juneau	Juneau	Juneau		Juneau
										Kake		Kake
Ketchikan	Ketchikan	Ketchikan	Ketchikan	Ketchikan			Ketchikan	Ketchikan	Ketchikan	Ketchikan		
Klawock	Klawock		Klawock				Klawock		Klawock			Klawock
							Mt. Edgecumbe			Mt. Edgecumbe		
			Pelican									
Petersburg	Petersburg	Petersburg	Petersburg	Petersburg			Petersburg					Petersburg
	Sitka		Sitka				Sitka	Sitka	Sitka	Sitka		Sitka
												Skagway
	Wrangell		Wrangell							Wrangell		Wrangell
		Yakutat	Yakutat									Yakutat
University of Alaska												
											UAS	
	UAS Juneau		UAS Juneau	UAS Juneau			UAS Juneau			UAS Juneau	Juneau	UAS Juneau
										UAS		UAS
			UAS Ketchikan							Ketchikan	UAS Sitka	Ketchikan
			UAS Sitka				UAS Sitka			UAS Sitka		UAS Sitka
Other												
Sheldon Jackson College	T & H Alaska Vocational Training Resource Center		Sheldon Jackson College									
			SERRC							SERRC		

Southeast(Con't)

Agricultural & Natural Resources	Architecture & Construction	Arts, A/V Technology & Commun	Business & Adminis-tration	Education & Training	Finance	Government	Health Services	Hospitality & Tourism	Human Services	Information Technology	Law & Public Safety	Manufacturing
Other												
	T & H Alaska Vocational Training Resource Center		T & H Alaska Vocational Training Resource Center									

Retail/ Wholesale Sales & Services	Scientific Research/ Engineering	Transportation Distribution & Logistics
School Districts		
		Annette Island
		Chatham
		Craig
		Hoonah
		Juneau
		Kake
		Ketchikan
		Klawock
Petersburg	Petersburg	
		Sitka
		Skagway
		Wrangell
University of Alaska		
	UAS Juneau	UAS Juneau
	UAS Ketchikan	UAS Ketchikan
	UAS Sitka	

Southwest Region

Agricultural & Natural Resources	Architecture & Construction	Arts, A/V Technology & Commun	Business & Adminis-tration	Education & Training	Finance	Government	Health Services	Hospitality & Tourism	Human Services	Information Technology	Law & Public Safety	Manufac-turing
School Districts												
			Aleutian Region									
	Aleutians East		Aleutians East									Aleutians East
		Bristol Bay	Bristol Bay						Bristol Bay			Bristol Bay
	Bristol Bay SD	SD	SD						SD			SD
Kodiak SD	Kodiak SD	Kodiak SD	Kodiak SD						Kodiak SD			Kodiak SD
		Pribilofs	Pribilofs				Pribilofs			Pribilofs		
Unalaska	Southwest		Southwest						Southwest			Southwest
	Unalaska	Unalaska	Unalaska						Unalaska			Unalaska
University of Alaska												
UAF Bristol Bay			UAF Bristol Bay	UAF Bristol Bay			UAF Bristol Bay		UAF Bristol Bay	UAF Bristol Bay		
			UAA Kodiak									

Retail/ Wholesale Sales & Services	Scientific Research/ Engineering	Transportation Distribibution & Logistics
School Districts		
		Aleutians East
	Bristol Bay SD	
		Kodiak SD
		Pribilofs
		Southwest
	Unalaska	Unalaska
University of Alaska		
	UAF Bristol Bay	
	UAA Kodiak	

Western Region

Agricultural & Natural Resources	Architecture & Construction	Arts, A/V Technology & Commun	Business & Adminis-tration	Education & Training	Finance	Government	Health Services	Hospitality & Tourism	Human Services	Information Technology	Law & Public Safety	Manufacturing
School Districts												
		Kashunamiut	Kashunamiut									
Lower Kusk	Lower Kusk		Lower Kusk Lower Yukon	Lower Kusk	Lower Kusk		Lower Kusk		Lower Kusk		Lower Kusk	Lower Kusk
	St. Mary's Yupiit		St. Mary's Yupiit						St. Mary's			Yupiit
University of Alaska												
			UAF	UAF			UAF		UAF	UAF		
UAF Kuskokwim			Kuskokwim	Kuskokwim			Kuskokwim		Kuskokwim	Kuskokwim		
Other												

Retail/ Wholesale Sales & Services	Scientific Research/ Engineering	Transportation Distribibution & Logistics
School Districts		
		Kashunamiut
Lower Kusk		Lower Kusk
		St. Mary's
Other		
		YTS Flight Training - Bethel

In addition to the training opportunities displayed in the above charts, Alaska has a healthy apprenticeship sector. The U.S. Department of Labor lists over 160 organizations and businesses that have been approved to offer apprenticeships. Although not all of these are active at any one time, the following pages indicate the extent of coverage.

Registered Apprenticeships by Region					
Anchorage/Mat Su					Gulf Coast
A Comp Co	Alaska Safety and Environmental Training and ServirA	Elite Nail Studio	North Pacific Business Institute	Pro Air	Homer Volunteer Fire Department
Access Alaska	Alaska Technical Training	Emergency Medical Instruction of Alaska	Oil Spill Consultants	Safety Health & Environmental Services	Indian Valley International, Inc
Aero Tech Flight Service, Inc	Alaska Travel Concepts	Environmental Management, Inc.	Older Persons Action Group	Environmental Health Scienc Alaska, Inc	Alaska Flying Network
AGC Safety Inc.	Alaska Works Partnership Inc.	Environmental Safety & Health of Alaska	Pacific Environmental Corporation/PENCO	Masterwork Technical	F&F Safety Specialtists, Inc
Akeela, Inc	American Marine Corporation	eTerra, LLC	Piledrivers and Divers Union Local 2520	Alaska Job Corps Center	R.L. Construction
Alaska Bar Review	ASTI) South Central Chapter	Fairweather, Inc.	Professional Dynamics	Alaska Nautical Training School	Cloud Nine Professional Real Estate/Kenal Peninsula
Alaska Building Science Network	Anchorage Pioneer Home	GeoNorth, LLC	Regional Alcohol & Drug Abuse counselor Training	Health Education Center	Wesley Rehabilitation and Care Center
Alaska Chopper	Arctic Flyers	H & R Block Tax Services, Inc.	Seacorp Industries	Mustang Air, Inc	Alaska Vocational Technical Center
Alaska Computer Essentials	ABC of Alaska, Inc	Haz Mat Transportation Services	Simply Pilar School of Modeling	Nightingale Neighbors	Alaska Travel Experts
Alaska Education and Recreational Products	Association of Clinical Pastoral Educators	Hazwoper Associates, Inc	Stan L. Shields	Alaska School of Taxidermy	Heritage Place
Alaska Environmental Consulting	Aurora Environmental and Safety	Health TV Channel Inc., The	International Association for Spiritual Consciousness	A-1 Driver Education Services	Lambe, Tuter, Wagner, & Moore
	Bar Stars Professional Bartending School	Jesco, Inc	Oriental Healing Arts School of Massage Therapy	Alaska Manufacturing Contractors	SEGO Consultants
Alaska Inventors & Entrepreneurs Association	Child Care Connection, Inc.	Job Ready, Inc	Whitehead and Asocciates, Inc	Alaska Medical Training Services	VT Oil Spill & Tehnical Consultants
Alaska Joint Electrical Apprenticeship & Training Trust	Church of Scientology	Keystory Vending Apprentice	Alaska Fire Service Training	Assisted Living Academy	
Alaska Laborers Training Trust	CompuCom Alaska	Last Frontier Driving	Nana Training Systems	BIO Environmental Alaska Response Training & Consi Wasilla	
Alaska Medcode	Comroom	Managed Intedged Integrity Services, Inc	Dental Careers Foundation	Guys & Gals Hairstyling	
Alaska Operating Engineers (JATC)	Delta Western	Mila, Inc.	Infinite Visions Educational Systems, Inc.	Mat-Su Midwifery, Inc	
Alaska Professional Testing, Inc.	Dental Careers Foundation	Multi-Sea	Roofers & Waterproofers Local Union 190	South Central AK Chapter of the American Society	
Alaska Professional Volunteers, Inc.	Dept of Health & Social Services	Network Business System		The Way to Go Services	
ARECA Training Council	DCS Learning Center, Inc.	Nine Star Enterprises		Training Solutions	

Registered Apprenticeships by Region				
Interior	**Northern**	**Southeast**	**Southwest**	**Western**
Delta Care Coordination Services	Painters & Allied Trades LU 1555	Alaska Timberland	Bristol Bay Native Corporation	Bethel Native Corporation
Delta Mine Training Center	Safety First Instruction	Acupressure Institute of Alaska		
Elmendorf Aero Club	School of Integrating Shiatsu Alaska	Alaska Coastal Homes, Inc.		
Alaska West Training Center	Silicon rush Network Services Group	Central Council Tlingit & Haida Indian Tribes of AK Juneau		
Andaloro & Associates	Tanana Chiefs Conference, Inc.	Channel Dive Center, Inc.		
Aria Studios Modeling School and Agency	Tanana Valley Chapter-American Red Gross	Cornerstone Home Health		
Asbestos Removal Specialists of Alaska	Team Cutters Inc	DCI Alaska		
Burgess Transportation	The Minority Ed & Entrepreneurship Trng, Inc	Juneau's Advertising & Production Headquarters		
Denali Center	Third Sector Technologies	White Horse Christian Training Center		
Fair Net, Inc	Via Vita Missions	Productivity Improvement Center		
Fairbanks Cousefing & Adoption	Fairbanks Flight Training	Alaska Video Institute		
FBKS Area Painters & Allied Trades Joint Appr	Warbelow's Air Ventures, Inc	Tribal Tours		
Fairbanks Police Department	YTS, LLC	AK Resources and Econ Development		
Interior Ambulance Rescue Squad	Black Rapids Timber Framing Schools			
Interior Athabascan Tribal College	Wilson & Wilson Certified Public Accountants			
Literacy Council of Alaska	Traditional School of Sacred Arts			
Hutchison Career Center				
North Star Computing				

B. Participation

Some current data on participation is available for almost all training programs. However, as mentioned earlier, there have been significant changes in the manner in which enrollment data for secondary and public postsecondary institutions is collected and reported. Perkins III, for example, requires states to report unduplicated student data whereas 1997 data was by the number of courses taken.

A similar situation exists at the University of Alaska. Prior to 1997, the university did not track vocational education degrees separately. In order to get information for the earlier report, the author looked at enrollment in all classes and culled out those courses which were vocational or technical in nature, as evidenced by the course title. Today's university statistics give a much more accurate picture of people who are benefiting from "organized educational programs offering sequences of study directly related to preparing individuals for paid or unpaid employment,[18]" but do not capture those students who take a course or two for skill upgrade.

Due to WIA, some data is also now available on participation in private vocational training, data which was unavailable at the time of the earlier report.

1) Secondary Enrollment

Although now reported by unduplicated count, the Alaska DEED has kept some duplicated count information which can be used to compare with 1997. The following table gives historical duplicated counts by career cluster.

Table 4
Duplicated Secondary Enrollment
FY99 – FY03

School Year	Agriculture, Food & Natural Resources	Architecture & Construction	Manufacturing	Transportation, Distribution & Logistics	Information Technology	Marketing, Sales & Service
19981999	1261	2796	3827	2592	2059	1440
19992000	1040	2687	3685	2556	2304	1376
20002001	747	2801	2529	2183	2532	1059
20012002	822	3287	2953	2347	3425	1305
20022003	4720	3752	3484	2100	3417	534

[18] The definition of career and technical education in Perkins III

Table 4 (Con't)

	Finance	Hospitality & Tourism	Business, Management & Administration Services	Health Science	Human Services	Arts, AV Technology & Communications
19981999	583	2126	7939	251	1912	2747
19992000	624	1846	6852	320	2093	3496
20002001	758	2207	6610	270	2161	2285
20012002	872	2532	7807	383	2373	2882
20022003	624	954	4267	601	2281	2243
	Law, Public Safety & Security	Science, Technology, Engineering & Mathematics	Education & Training	Government & Public Administration		
19981999	105	2996	574	469		
19992000	119	2568	378	194		
20002001	33	2940	745	0		
20012002	41	2869	832	24		
20022003	30	2911	478	0		

Because clusters have changed substantially since 1997, a direct comparison by program area is impossible. However, it is possible to compare duplicated statewide totals across time periods, as in Table 5.

Table 5
Duplicated Secondary Count
Statewide Totals

Year	Total Duplicated Enrollment
1995-1996	38,397
1998-1999	37,011
1999-2000	37,941
2000-2001	31,372
2001-2002	34,732
2002-2003	34,796

This table indicates a 9.4% decline in duplicated counts over the period.

Unduplicated enrollment figures are available starting with the 1998-99 school year. However, although district have become more accurate in reporting unduplicated counts, there have been several inconsistencies, most notably a glitch in the computer reporting from the Anchorage School District, which has resulted in significant overstatement of enrollments for the past several years. This can be seen in the following table, where enrollment in the Anchorage-Mat-Su region makes a significant jump between the 1999-2000 and 2000-2001 school years.

Table 6
Regional Unduplicated Counts
1998-2002

	1998-1999	1999-2000	2000-2001	2001-2002	% change over period
Anch/Mat Su	8226	8167	10944	11102	35%
Gulf Coast	3802	4002	2473	2431	-36%
Interior	3417	3360	2367	3176	-7%
Northern	1147	1641	1190	1324	15%
Southeast	3443	4292	2808	2838	-18%
Southwest	1100	1185	655	853	-22%
Western	1149	918	977	1194	4%
TOTAL	22283	23564	21413	22917	3%

To get a more accurate picture of what is happening outside of the major metropolitan center of the state, the following table gives yearly totals without Anchorage.

Table 7
Unduplicated Statewide and Regional Totals
Without Anchorage 1998-2002

	1998-1999	1999-2000	2000-2001	2001-2002	% change over period
Mat-Su only	2232	2187	2184	2241	0%
Gulf Coast	3802	4002	2473	2431	-36%
Interior	3417	3360	2367	3176	-7%
Northern	1147	1641	1190	1324	15%
Southeast	3443	4292	2808	2838	-18%
Southwest	1100	1185	655	853	-22%
Western	1149	918	977	1194	4%
TOTAL	16,289	17,584	12,653	14,056	-14%

As can be seen from this table, the change in statewide participation is significantly negative instead of the slight (4%) positive growth indicated with the inclusion of the Anchorage figures. This revised statistic is much more in line with the general perception, gleaned from interviews with state stakeholders, that the combination of forces described in Section I have had considerable negative impact on vocational education at the secondary level.

School Year 2002-2003 data are still in the preliminary stages as this report is being written. The following three tables display this preliminary data, first by gender and cluster by region, second by cluster by region and finally, by cluster with some adjustments made to the Anchorage Mat-Su data to bring it more in line with past years.

Table 8
Unduplicated Count
By Cluster and Gender By Region
2002-2003 Preliminary Data

	Anchorage/ Mat Su			Gulf Coast			Interior			Northern			Southeast			Southwest			Western		
	F	M	Total	F	M	Total	F	M	Total	F	M	Total	F	M	Total	F	M	Total	F	M	Total
Ag & Natural Resources	2220	2135	4355	0	2	2	4	14	18	5	7	12	4	52	56	9	43	52	0	0	0
Architecture & Construction	35	213	248	39	222	261	79	350	429	48	199	247	54	163	217	44	132	176	17	64	81
Manufacturing	155	488	643	49	284	333	33	53	86	47	145	192	78	263	341	15	74	89	8	46	54
Transportation	70	378	448	20	132	152	26	195	221	9	48	57	24	77	101	3	46	49	10	15	25
Information Technology	24	88	112	358	408	766	25	97	122	31	15	46	210	241	451	0	2	2	90	123	213
Marketing, Sales & Service	77	61	138	87	32	119	0	0	0	0	0	0	9	33	42	0	0	0	2	9	11
Finance	45	43	88	107	66	173	13	17	30	0	1	1	8	3	11	0	0	0	1	0	1
Hospitality & Tourism	215	185	400	131	66	197	17	9	26	6	0	6	30	36	66	0	0	0	19	14	33
Business Services	1351	1488	2839	42	14	56	361	279	640	164	114	278	239	245	484	199	99	298	101	89	190
Health Science	88	33	121	43	23	66	46	11	57	0	0	0	121	42	163	5	0	5	8	2	10
Human Services	632	188	820	78	31	109	144	70	214	48	15	63	162	52	214	63	46	109	16	13	29
Arts & Communications	534	475	1009	63	56	119	36	43	79	112	53	165	73	33	106	30	41	71	3	0	3
Law, Public Safety	0	0	0	8	7	15	0	0	0	1	2	3	0	0	0	0	0	0	0	0	0
Science, Tech & Engineering	133	876	1009	85	189	274	217	436	653	1	0	1	0	0	0	0	0	0	0	0	0
Education & Training		9	9	0	0	0	0	0	0	34	22	56	7	5	12	0	0	0	15	3	18
Gov't & Public Adm		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	5579	6660	12239	1110	1532	2642	1001	1574	2575	506	621	1127	1019	1245	2264	368	483	851	290	378	668

Table 9
2002-2003 Data By Cluster by Region

School Year 2002/ 2003	Anchorage/ Mat-Su	Gulf Coast	Interior	Northern	Southeast	Southwest	Western	Statewide Totals
Agriculture, Food & Natural Resources	4355	2	18	12	56	52	0	4495
Architecture & Construction	248	261	429	247	217	176	81	1659
Manufacturing	643	333	86	192	341	89	54	1738
Transportation, Distribution & Logistics	448	152	221	57	101	49	25	1053
Information Technology	112	766	122	46	451	2	213	1712
Marketing, Sales & Service	138	119	0	0	42	0	11	310
Finance	88	173	30	1	11	0	1	304
Hospitality & Tourism	400	197	26	6	66	0	33	728
Business, Management & Administration Services	2839	56	640	278	484	298	190	4785
Health Science	121	66	57	0	163	5	10	422
Human Services	820	109	214	63	214	109	29	1558
Arts, AV Technology & Communications	1009	119	79	165	106	71	3	1552
Law, Public Safety & Security	0	15	0	3	0	0	0	18
Science, Technology, Engineering & Mathematics	1009	274	653	1	0	0	0	1937
Education & Training	11	0	0	56	12	0	18	97
Government & Public Administration	0	0	0	0	0	0	0	0
Total – All Clusters	12241	2642	2575	1127	2264	851	668	22368

As can be seen from this table, the figures for Agriculture, Food and Natural resources for the Anchorage/Mat-Su region seem greatly inflated. If these figures are arbitrarily adjusted back to prior year levels the 2002-2003 enrollment drops considerably, as shown in the following table.

Table 10
Regional Enrollment by Cluster with
Corrected Anchorage/Mat Su Agriculture Totals

	Anchorage	Gulf Coast	Interior	Northern	Southeast	Southwest	Western	Statewide
Ag & Natural Resources	147	2	18	12	56	52	0	287
Architecture & Construction	248	261	429	247	217	176	81	1659
Manufacturing	643	333	86	192	341	89	54	1738
Transportation	448	152	221	57	101	49	25	1053
Information Technology	112	766	122	46	451	2	213	1712
Marketing, Sales & Service	138	119	0	0	42	0	11	310
Finance	88	173	30	1	11	0	1	304
Hospitality & Tourism	400	197	26	6	66	0	33	728
Business Services	2839	56	640	278	484	298	190	4785
Health Science	121	66	57	0	163	5	10	422
Human Services	820	109	214	63	214	109	29	1558
Arts & Communications	1009	119	79	165	106	71	3	1552
Law, Public Safety	0	15	0	3	0	0	0	18
Science, Tech & Engineering	1009	274	653	1	0	0	0	1937
Education & Training	9	0	0	56	12	0	18	95
Gov't & Public Adm	0	0	0	0	0	0	0	0
								0
Totals	8031	2642	2575	1127	2264	851	668	18158

Secondary enrollments by gender and special populations continue to be of interest to policy makers. As Table 8 indicates, female participation in secondary programs continues to lag behind that of males to a ratio of about 1:1.26.

Because of the differences in reporting methods, special population numbers are not comparable between the two reports. However, the following two tables indicate enrollment by race and special circumstance, respectively, for the latest year for which data are available.

Table 11
2001-2002 Secondary Enrollments
By Race and Region

2001/2002	American Indian or Alaska Native	Asian	Black or African American	Hispanic or Latino	Native Hawaiian or Other Pacific Islander	Unknown/ Other	White	Totals
Anchorage/Mat-Su	1089	800	757	474	225	160	7597	11102
Gulf Coast	310	2	21	28	63	0	2007	2431
Interior	838	70	159	74	0	5	2030	3176
Northern	1142	32	2	5	0	62	81	1324
Southeast	1000	154	19	65	1	0	1596	2835
Southwest	356	11	7	13	114	1	351	853
Western	1123	3	11	0	0	1	56	1194
All Alaska	5858	1072	976	659	403	229	13718	22915[19]

As can be seen from the above table, Alaska Native participation in vocational education programs makes up about one forth of the total participation. This percentage of the total has fallen since 1997, when Alaska Native students counted for over one-third of the total. This statistic can be considered from several points of view. On the positive side, because much of the 2001-2002 Alaska Native enrollment is in rural Alaska, it would appear that most small, rural high schools are continuing to provide at least some career and vocational education despite countervailing pressures. On the negative side, it would indicate that vocational programming is being slowly pushed out of rural schools as more attention is paid to basic skill attainment through traditional academic courses.

Table 12
2001-2002
Secondary Enrollments
By Special Need by Region

Region	Displaced Home-makers	Econom-ically Disadvant-aged	Limited English Proficient	Single Parents	Students with IEPs	Students With Other Barriers
Anchorage/Mat-Su	0	399	1493	0	1088	256
Gulf Coast	0	394	28	2	41	1239
Interior	95	835	255	34	214	232
Northern	0	553	197	31	127	79
Southeast	0	778	39	21	243	21
Southwest	2	223	167	20	66	7
Western	22	949	789	44	36	48
All Alaska	119	4131	2968	152	1815	1882

[19] Statewide totals are slightly different from the district worksheets provided by DEED and the totals on the Perkins reports (22,915 vs. 29,922)

As mentioned in Section I, Perkins III greatly diminished the earlier focus on special populations by eliminating many of the set asides and provisions dealing with these groups. Statewide comparisons can be made with the 1997 data in terms of the percent of total enrollees represented by special populations in the three areas which have remained consistent across that time period: Disadvantaged, Limited English-Speaking Ability and Disabled (Students with Individual Education Programs (IEPs).

Table 13
Basic Grant Special Needs Enrollment
As a Percent of Total Enrollment
1995-1996/2001-2002

Category	1995-1996	2001-2002	% of Total 1995-1996	% of Total 2001-2002
Economically Disadvantaged	11716	4133	30.5%	18.0%
LEP	5067	2944	13.2%	12.8%
Students with IEPs	3581	1801		
Statewide	38397	22922	9.3%	7.9%

As can be seen from this table, participation of special populations as a percentage of total participation has declined for all three groups in the change from Perkins II to Perkins III.

Race and special needs population data by region is available only for the 2001-2002 school year. However, a three-year statewide total for both secondary and postsecondary Perkins is available. The following table displays this information for both Perkins Basic Grant and Perkins Tech Prep participants. However, the reader is warned that the Tech Prep data is considered unreliable by the Alaska DEED.

The data is given here to show that at least for the Basic Grant, participation by special populations since the beginning of Perkins III has remained quite constant. The data is also presented because it contains the only postsecondary figures that provide an estimate of all Alaskans taking a vocationally-oriented course, not just those who are formally enrolled in a certificate or degree program. The UA system does not keep race or special population data in the format requested by Perkins, so it is not possible to report these numbers for the system.

Table 14
1999 – 2002 Enrollment by Gender, Race and Special Population
Perkins Basic Grant and Tech Prep
Secondary and Postsecondary

		Basic Grant	Tech Prep	Basic Grant	Tech Prep	Basic Grant	Tech Prep
		1999-2000		2000-2001		2001-2002	
All	Male	19315	1818	19812	1011	21818	1155
All	Female	18826	1289	18541	735	20935	904
All	Grand Total	38141	3107	38353	1746	42753	2059
Secondary	Male	11162	1816	12212	1008	12793	1155
Secondary	Female	8662	1288	9318	735	10129	903
Secondary	Sub-Total	19824	3104	21530	1743	22922	2059
Secondary	American Indian or Alaska Native	5709	688	5406	181		227
Secondary	Asian	1146	216	1393	49	1070	140
Secondary	Black or African American	713	96	874	77	975	83
Secondary	Hispanic or Latino	498	54	547	40	657	56
Secondary	White	11065	1915	13086	1392	13672	1538
Secondary	Unknown/ Other	117	23	224	4	632	14
Secondary	Disabled	972	147	1650	126	1801	133
Secondary	Economically Disadvantaged	3888	617	3478	215	4133	299
Secondary	Single Parents	562	200	117	12	163	6
Secondary	Displaced Homemakers	67	63	2	0	58	
Secondary	Students With Other Barriers	1711	519	2061	169	1884	100
Secondary	Limited English Proficient	2869	337	3062	51	2944	60
Secondary	Special Pops Sub-Total	10069	1883	10370	447	10992	598
Postsecondary	Male	8153	2	7600	3	9025	
Postsecondary	Female	10164	1	9223	0	10806	1
Postsecondary	Sub-total	18317	3	16823	3	19831	1

Table 14 shows a decided drop in postsecondary enrollment from 2000 to 2001 and a similarly-sized leap in enrollment from 2001 to 2002. This phenomenon is not exaplained by any of the other data reviewed.

One final way of looking at secondary participation rates is to look at vocational enrollments as a percentage of total secondary enrollment. The following table provides this comparison. It should be noted that the 2003 data is uncorrected. If the lower total

figure arrived at by correcting Anchorage totals is used, the percent of total for 2002-2003 drops to 45.4%.

Table 15
Perkins Enrollment as a percent of
Total Secondary Enrollment

School Year	Total	Female	Male
1998-1999			
Total Perkins	22284	9429	12855
Total All	38401	18419	19982
	58.0%	51.2%	64.3%
1999-2000			
Total Perkins	23565	10129	13436
Total All	37938	18264	19674
	62.1%	55.5%	68.3%
2000-2001			
Total Perkins	21414	9252	12162
Total All	38914	18743	20171
	55.0%	49.4%	60.3%
2001-2002			
Total Perkins	22918	10125	12793
Total All	39461	19060	20401
	58.1%	53.1%	62.7%
2002-2003			
Total Perkins	22366	9873	12493
Total All	39984	19232	20752
	55.9%	51.3%	60.2%

Even if the correction to the data is not made, however, the above table shows a decrease in vocational enrollment as a percentage of the total since the 1998-1999 school year.

2. Postsecondary Enrollment

Postsecondary enrollment figures are available from the University of Alaska, AVTEC, selected Eligible Training Providers, and some labor union apprenticeship programs. As mentioned above, the University figures are not comparable with 1997 data. Exit figures are now available for many private postsecondary programs as well as for the state's technical centers and many union apprenticeship programs. Although these data are not

directly comparable with the 1997 data, which listed all enrollment not just exiters, summary data from the 1997 report will be displayed to give some sense of trends in level of training.

a) University of Alaska

The university began tracking vocation certificate and degree enrollment with the 1997-98 academic year. As mentioned, these figures represent only those students enrolled in a one or two year certificate or a vocational associate degree.[20] Although an attempt was made to identify students enrolled in what is known as a Departmental or Non-transcripted certificate, this information is not currently available; however, UA system staff are attempting to find a means of capturing this data. The author did research the Departmental certificates offered at each campus. The results of this research are found in the table of UA certificate and degree programs in the appendix.

A Departmental Certificate is one which is given by a program but which is not formally recognized by the Board of Regents. These certificates are often less than one year in length and do not necessarily meet the written and computational skill requirements for a one- or two-year certificate. However, as a glance at the table in the appendix will reveal, many of these departmental certificates are in high growth areas such as computer applications, computer networking and medical assistant. A problem with departmental and non-transcripted certificates is that students in these programs cannot receive student loans. The 1997 report recommended that the university system remove barriers to these types of programs, including the financial barrier. This recommendation is made again today.

Table 16
Fall Enrollment in Vocational Certificate and Degree Programs
University of Alaska
1997 – 2002

	Fall enrollment					
Region	1997	1998	1999	2000	2001	2002
Anchorage/ Mat-Su	1613	1693	1497	1448	1563	1666
Gulf Coast	167	185	153	219	304	280
Interior	471	539	566	607	644	746
Northern	12	7	8	5	7	14
Southeast	199	191	219	228	253	259
Southwest	69	80	60	44	59	63
Western	31	20	11	28	24	23
Total	2562	2715	2514	2579	2854	3051

[20] General Studies AAS degree enrollees have been removed from the data

Table 17
Vocational Certificate/Degrees Awarded
University of Alaska
1997-2002

	Degrees awarded					
Region	1997	1998	1999	2000	2001	2002
Anchorage/ Mat-Su	365	351	339	303	287	335
Gulf Coast	32	37	37	33	35	78
Interior	131	139	160	190	223	200
Northern	19	4	4	9	2	10
Southeast	66	54	47	52	41	43
Southwest	17	42	18	21	15	14
Western	10	47	18	32	6	18
Total	640	674	623	640	609	698

University enrollments and degrees can also be displayed by cluster, as shown below.

Table 18
University of Alaska
Fall Enrollment by Cluster
1997 - 2002

	Fall enrollment					
	1997	1998	1999	2000	2001	2002
Ag & Natural Resources	3	6	6	4	2	2
Architecture & Construction	64	53	41	34	34	41
Arts & Communications	3	3	1	4	1	3
Business Services	714	735	673	628	662	629
Education & Training	100	111	126	144	173	224
Gov't & Public Adm	0	0	0	0	0	5
Health Science	762	824	698	800	815	936
Hospitality & Tourism	74	75	79	78	84	78
Human Services	0	0	0	0	1	0
Information Technology	178	208	252	248	234	210
Law, Public Safety	244	227	210	175	188	199
Manufacturing	25	21	28	22	24	33
Science, Tech & Engineering	173	204	177	240	416	445
Transportation	222	248	223	202	220	246
Total	2562	2715	2514	2579	2854	3051

As can be seen from the above totals, enrollment in Education and Training has more than doubled over the time period thanks in large part to the statewide distance delivery of an AAS degree targeted at assisting Head Start teachers to meet a federal mandate for associate degrees. Health Science enrollment is also increased by about 23 percent, and should continue to grow as new distance-delivered health programs, described in Section III of this report, come on line. The largest gainer, however, has been the Science, Technology and Engineering cluster, with two and one half times the enrollment in 2002 as in 1997. Bold numbers in Table 16 indicate certificates/degrees that are delivered in part of totally by distance.

Table 19
Degrees Awarded by Cluster
1997-2002

	Degrees awarded					
	1997	1998	1999	2000	2001	2002
Ag & Natural Resources	2	2	2	2	2	2
Architecture & Construction	20	25	46	15	20	22
Arts & Communications	2	3	2	0	1	1
Business Services	**152**	**150**	**141**	**157**	**174**	**123**
Education & Training	**8**	**24**	**26**	**23**	**22**	**30**
Gov't & Public Adm	0	0	0	0	0	0
Health Science	**224**	**239**	**186**	**217**	**183**	**219**
Hospitality & Tourism	21	19	27	20	15	26
Human Services	0	0	0	0	0	0
Information Technology	38	37	25	42	36	44
Law, Public Safety	74	59	57	57	59	62
Manufacturing	2	4	1	4	2	4
Science, Tech & Engineering	**39**	**42**	**45**	**30**	**35**	**101**
Transportation	58	70	65	73	60	64
Total	640	674	623	640	609	698

Again, Education and Technical Engineering certificates and degrees show the greatest growth over the period. UA success in awarding degrees in high demand areas will be discussed at more length in the section on performance measures.

b) Other Postsecondary Institutions

After the University of Alaska system, the Alaska Vocational Technical Education Center at Seward is perhaps the highest volume single trainer in the state. Fall, 2003, enrollment at the Center in its various programs, by cluster, is reported below.

Table 20
AVTEC Fall 03 Enrollment
By Sector - Unduplicated

Cluster	Fall 03
Ag & Natural Resources	50
Architecture & Construction	106
Arts & Communications	0
Business Services	172
Education & Training	0
Gov't & Public Adm	0
Health Science	157
Hospitality & Tourism	186
Human Services	0
Information Technology	87
Law, Public Safety	0
Manufacturing	86
Science, Tech & Engineering	0
Transportation	351
Total	1198

An additional 194 students were enrolled in correspondence courses in a variety of areas. These enrollment figures compare very favorably to the total of 697 for Fall, 1997.

Information reported to the Alaska Department of Labor and Work Development (DLWD) by Eligible Training providers gives another look at enrollments. The following tables display the number of exiters in these programs for FY03. Exit numbers understate enrollment, since there are additional students in the pipeline. However, they do give a sense as to the volume of enrollment by institution and of the institution's success in keeping students through to completion.

Table 21
Exiter Information for Public Postsecondary Institutions
Other then the U of A
FT2003

Provider Name	Number of Exiters	Number of Completers	Number of Noncompleters
Alaska Technical Center	326	297	29
Alaska Vocational Technical Center	2,199	2,062	137
Ilisagvik College	251	43	251

Table 22: Exiter Information for Private Postsecondary Institutions FY03

Provider Name	Number of Exiters	Number of Completers	Number of Noncompleters		Provider Name	Number ofExiters	Number of Completers	Number of Noncompleters		Provider Name	Number ofExiters	Number of Completers	Number of Noncompleters
A Head of Time Design Academy	7	5	2		Becker Conviser Professional Review					New Frontier Vocational-Technical Center	57	52	5
ABC of Alaska	61	6	55		Career Academy	716	524	192		Pacific Rim Institution of Safety & Management	80	75	NA
Academy of Hair Design	24	15	9		Center for Employment Education	880	868	11		Regional Alcohol & Drug Abuse Counselor Training*	26	26	100
Aero Tech Flight Services	85	67	18		Center for Employment Education	128	120	7		SEGO Consultants	25	15	10
AGC Safety Inc.	5	5	0		Charter College	71	6	65		SERRC - Alaska Vocational Institute	81	63	18
Alaska Computer Essentials*	196	190	6		Delta Mine Training Center	119	119	0		Shear Allusions 2000 Training Salon	12	12	0
Alaska School of Taxidermy	4	4	0		Double Header Training Center	8	2	6		Take Flight Alaska	13	1	20
Amundsen Educational Center					Environmental Management Inc.	1,321	1,321	0		Testing Institute of Alaska	51	47	4
Ariel's Hair Design School	25	13	12		MILA Administrative Services, Inc.	110	110	NA		Trend Setters School of Beauty	88	61	27
Asbestos Removal Specialists of Alaska	102	102	0		National Outdoor Leadership School	25	25	12		Wilderness Medicine Institute	118	117	1

Table 23
Exiters by Apprenticeship Program
FY03

Provider Name	Number of Exiters	Number of Completers	Number of Noncompleters		Provider Name	Number of Exiters	Number of Completers	Number of Noncompleters
Alaska Joint Electrical Apprenticeship & Training	33	33	0		Fairbanks Area Plumber and Pipefitters	6	6	0
Alaska Ironworkers	46	33	13		Fairbanks Painting and Allied Trades	55	54	1
Alaska Laborer's Training Trust	52	44	8		Heat & Frost Insulators & Asbestos Workers Local 97	15	9	6
Alaska Operating Engineers Apprentice Training Trust	296	205	1		IUBAC Le I Bricklayers & Craftsman	2	2	0
Alaska Trowel Trades	14	0	14					

Additional information on apprenticeship enrollment was obtained through interviews with union officials, who reported the following enrollments as of October, 2003:

Table 24
Additional Apprenticeship Enrollments

Union	Program	Current Reported Enrollment
Alaska Teamsters	Surveyors	8
Teamster Training Center	Construction Driver	10
Operating Engineers	Operating Engineers	Between 110 and 120
Plumbers and Pipefitters	Plumbing	50

C. Funding

Funding changes at the secondary, postsecondary and adult levels are one of the most prominent feature shifts during the time between the two status reports.

2. Secondary Funding

As described above, the first major change came through SB36 of the 1998 session that eliminated targeted funding for vocational education and other categorical programs in favor of block funding equal to 20 percent of the regular foundation allotment. Under the new program, districts are no longer required to account separately for expenditures on former categorical programs, with the exception of special education. Therefore, after FY98, it is no longer possible to determine district and state expenditures for vocational education at the secondary level. Table 25 displays the data from the last three years of vocational funding.

As can be seen from this table, although statewide expenditures for regular education increased by about 4 percent—from $403,651,369 to $419,433,587—statewide expenditures for vocational education had remained essentially flat for the last three years of separate categorical funding.

The author asked the assistance of the Association of Alaska School Boards in getting a sense of current district expenditures. AASB surveyed its membership on the following questions:

> 1. Please estimate what the district spends in local or state dollars (not federal funds) on vocational education in a given year? (Voc Ed is defined as programs approved by EED under the Carl Perkins Act.)
>
> 2. In light of increasing special education costs, have Voc Ed state funds for your district increased, decreased, or remained about the same since SB 36 was passed into law in June 1998 when "Special Needs" funding (combining special education except intensive services, bilingual and voc ed) was capped at 20% of the district budget?

Seventeen districts responded to this query. The results are displayed below.

Table 26
District Responses to Vocational Expenditures Survey

State/local Funding for Vocational Education	Vocational Expenditures since SB36
11 Some funds	1 Increased
2 No funds	8 Decreased
	4 Same
4 unknown	4 unknown
Total-17	Total-17

Table 26:Vocational Education and Regular Education Expenditures by District

School District	Fy96 Expend. Regular Instruction	Fy96 Expend. Vocational Education	Fy97 Expend. Regular Instruction	Fy97 Expend. Vocational Education	Fy98 Expend. Regular Instruction	Fy98 Expend. Vocational Education
Aleutians East	2,347,981	171,828	2,316,671	42,381	2,188,703	71,235
Anchorage	126,035,958	6,311,326	125,208,691	6,635,025	131,983,047	6,756,866
Bristol Bay	1,385,781	189,321	1,498,779	198,097	1,553,891	170,759
Cordova	1,862,788	215,823	1,789,019	190,748	1,867,216	151,779
Craig	1,624,621		1,579,071	100,309	1,551,137	76,555
Denali	1,735,321	68,819	1,937,307	67,290	1,812,658	67,650
Dillingham	2,090,141	239,544	2,355,809	289,529	2,422,433	209,176
Fairbanks	50,299,455	2,039,245	51,583,369	2,292,245	49,440,723	2,049,332
Galena	895,810	94,639	789,162	130,202	1,090,856	320,578
Haines	1,494,661	109,698	1,532,854	145,351	1,555,406	155,169
Hoonah	1,041,006	144,522	1,121,759	160,661	1,100,543	143,758
Hydaburg	521,163	72,237	500,577	38,490	504,043	50,344
Juneau	16,716,493	640,058	16,499,175	575,623	16,183,632	539,853
Kake	720,526	94,308	847,318	110,199	827,347	101,717
Kenai	31,255,013	2,283,125	32,448,574	2,043,015	32,102,834	1,796,910
Ketchikan	8,125,995	476,845	8,935,963	508,601	8,322,827	334,959
Klawock	1,045,860	110,201	1,129,510	77,048	1,054,778	136,289
Kodiak	9,037,423	803,507	9,263,035	704,440	9,835,324	769,984
Lake & Pen.	3,101,230	53,992	3,189,300	78,434	3,405,929	78,378
Mat-Su	36,644,984	1,959,080	37,844,096	1,921,835	39,566,284	1,940,064
Nenana	688,924	53,776	664,576	60,389	751,336	76,369
Nome	2,571,526	175,618	2,713,298	176,567	2,803,329	131,299
North Slope	13,095,993	835,711	13,212,389	753,292	13,918,685	719,309
Nw Arctic	7,897,919	449,897	7,830,800	440,203	7,928,501	391,945
Pelican	279,227	22,371	243,177	26,963	242,660	17,995
Petersburg	2,506,530	194,103	2,602,128	169,484	2,712,063	173,910
Sitka	6,082,258	371,473	5,867,017	380,021	5,684,131	322,312

Table 26 (Con't) Vocational Education and Regular Education Expenditures by District

School District	Fy96 Expend. Regular Instruction	Fy96 Expend. Vocational Education	Fy97 Expend. Regular Instruction	Fy97 Expend. Vocational Education	Fy98 Expend. Regular Instruction	Fy98 Expend. Vocational Education
Skagway	718,101	9,272	830,240	16,156	755,828	34,457
St. Mary's	518,110	19,069	528,795	13,526	690,620	16,871
Tanana	431,783	63,493	349,635	87,573	399,288	70,181
Unalaska	1,477,633	121,321	1,744,479	111,659	1,826,430	44,549
Valdez	3,240,723	421,595	3,134,671	464,242	3,531,350	470,120
Wrangell	2,079,867	218,251	1,930,445	219,412	1,804,879	187,561
Yakutat	809,855	119,272	757,626	121,217	955,934	103,521
Copper River	2,626,377	169,558	2,455,747	255,530	2,382,873	214,330
Delta Greely	2,728,142	196,359	2,275,449	189,373	3,128,149	154,632
Iditarod	2,479,022	209,458	2,518,856	166,302	2,436,192	153,656
Kashunamiut	900,688	50,056	853,721	34,332	1,021,137	53,647
Kuspuk	2,943,727	157,330	3,031,305	163,690	2,860,127	194,690
Lower Kuskokwim	13,972,345	342,395	13,973,790	465,229	15,613,149	698,861
Lower Yukon	7,866,811	538,695	8,092,643	411,815	8,751,773	483,490
Pribilof	1,287,583	84,070	1,402,309	89,000	1,153,015	103,931
Se Island	2,206,889	77,552	2,257,780	83,912	2,070,919	69,779
Sw Region	3,342,298	24,075	3,863,876	24,483	4,133,586	24,203
Yukon Flats	2,876,867	72,781	3,144,287	107,575	2,564,294	108,565
Yukon-Koyukuk	3,739,658	349,014	3,551,347	345,212	3,508,368	338,238
Yupiit	1,435,177	149,966	1,391,768	182,592	1,414,402	168,071
Totals Reaa's	$63,270,710	$3,968,226	$64,471,466	$4,039,753	$67,058,942	$4,024,896
STATEWIDE TOTALS	$403,651,369	**$23,121,566**	$409,250,781	**$23,389,980**	$419,433,587	**$22,706,650**

Although one can no longer track vocational expenditures under the Foundation Program, there is widespread belief among both district-level vocational education personnel and others involved in workforce development that such expenditures have and are continuing to decline under the new funding system. A common remark is that increasing demands on special education—the major activity to be funded under the 20 percent block funding—have crowded out vocational spending. A look at the statewide trend in special education expenditures gives some credence to this theory.

Table 27
Regular and Special Education Expenditures
FY99 – FY02

	FY99	FY00	FY01	FY02	% change over period
Regular	$486,234,707	$498,812,197	$504,286,142	$521,862,979	7.3%
Special Ed	$ 114,653,821	$ 119,635,483	$ 127,728,837	$ 135,275,959	18.0%

With special education expenditures increasing at over twice the rate of regular instructional expenditures, it seems likely that an ever larger portion of the 20 percent block funding is of necessity being dedicated to these programs, leaving a shrinking piece of the pie for the the three other programs folded into the block grant: vocational education, bilingual education and gifted and talented education.

The only current information on secondary expenditures for vocational programs for Perkins III Basic Grants. As indicated in Section I, these funds are to be used for program improvement only. However, as state funding decreases, especially in the smaller districts, it seems likely that some of these funds are being used to support what would normally be considered regular program expenditures. Perkins III Basic Grant allocations have remained flat over the past three years.

Table 28
Carl Perkins Basic Grant Secondary Allocations

	FY 2002	FY2003	FY 2004
Anchorage/Mat Su	$ 1,239,175	$ 1,209,691	$ 1,228,402
Gulf Coast	$ 277,250	$ 282,825	$ 283,515
Interior	$ 503,002	$ 511,832	$ 498,581
Northern	$ 186,794	$ 187,995	$ 189,409
Southeast	$ 386,572	$ 389,697	$ 402,718
Southwest Region	$ 172,304	$ 181,474	$ 178,076
Western Region	$ 315,124	$ 335,506	$ 318,318
TOTAL	$ 3,080,223[21]	$ 3,099,021	$ 3,099,021

[21] FY02 does not include Lake and Peninsula School District

Perkins III funding to districts represents about a 20 percent increase over 1997, when Basic Grant allocations totaled $2,594, 710.

School districts may also compete for funding under the Tech Prep section of Perkins III. The following table shows amounts allocated under this section.

Table 29
Perkins Tech Prep Grant Allocations

	FY01	FY02	FY03	FY04
Delta Greely School District	97,438	$ 97,438	$ 89,528	$ 89,528
Lower Kuskokwim School District	105,403	$ 105,403	$ 96,847	$ 96,847
Matanuska-Susitna Borough S.D.	151,901	$ 151,909	$ 139,577	$ 139,577
Total:	354,742	$ 354,750	$ 325,952	$ 325,952
Note: Does not include carry forward from prior years				

2. University of Alaska Funding

The University of Alaska does not track funding for vocational program separately from regular instruction. However, expenditures for such program have increased over the period from several sources. First, some of the increased GF support that the university was successful in securing for fiscal years 01, 02 and 03 went to develop new vocational programs such as logistics, e-business, early childhood and nursing. Second, the University has received funding under SB289, which increased vocational offerings at the community campuses. In FY04, however, state support to the university fell below that needed to adequately fund increases in operating costs, with the result that the system is once again faced with cuts to program areas. In addition, it is the author's understanding that funding to the university under SB289 will be greatly scaled back after this fiscal year.

University campuses can compete for funding under the postsecondary provisions of Perkins III. The following table indicates the recipients and amounts of these awards over the current and past three fiscal years. Again, it will be seen that these amounts have been flat.

Table 30
Postsecondary Allocations

	FY01	FY02	FY03	FY04
AVTEC	101,971	$ 109,725	$103,626	$103,626
Kachemak Bay Campus, UAA	88,872	$ 93,439	$88,245	$88,245
Sitka Campus, UAS	174,504	$ 184,275	$174,031	$174,031
Tanana Valley Campus, UAF	118,315	$ 96,223	$117,760	$117,760
Total:	483,662	$ 483,662	$483,662	$483,662
Note: Does not include carry forward from prior years				

3. Vocational Technical Center Funding

The state has historically funded a large portion of operating expenditures for two technical centers: ATC at Kotzebue and AVTEC at Seward. The 1997 report indicated a 33 percent decline in state support for ATC over the decade between 1988 and 1998. During the same period, AVTEC had enjoyed a 19.3 percent increase in state General Fund support. The following table looks at the pattern of state support since the 1997 report.

Table 31
State Funding for Vocational Technical Centers
FY97 – FY04

	FY97	FY98	FY99	FY00	FY01	FY02	FY03	FY04
TOTALS								
Kotzebue Technical Center	634	634	634	0[22]	1157[23]	630.9	1100.9	800.9[24]
Alaska Vocational Technical Education Center	4620.2	4231.6	4952.1	5368.1	6537.1	7150.3	7297.3	7125.7
GENERAL FUND								
Kotzebue Technical Center	634	634	634	0	609	130	600	0
Alaska Vocational Technical Education Center	3556.2	3475.9	3483.3	3347.7	3320.7	3380.4	3372.6	3140.5
DESIGNATED RECEIPTS								
Kotzebue Technical Center	0	0	0	0	0	0	0	0
Alaska Vocational Technical Education Center	823.8	767.8	767.8	1207.5[25]	1207.5	1853	1899.6	1835.4
SB289 (AS23.15)								
Kotzebue Technical Center					548	500.9	500.9	500.9
Alaska Vocational Technical Education Center					1096	1001.8	1001.8	1009.5

[22] FY00 Legislative Intent for Kotzebue Technical Center: that UA Chukchi Community College work together with the Northwest Arctic School District and the Technical Center to consolidate and merge the two programs into one by July 1, 2001.
[23] The FY01 budget re-appropriated $609.0 GF to Kotzebue Technical Center and appropriated an additional $548.0 through SB 289.
[24] Both centers were transferred from the Alaska Department of Education and Early Development to the Alaska Department of Labor and Workforce Development on July 1, 2003. The FY04 budget appropriated $300.0 from federal Workforce Investment funds to the Kotzebue Technical Center and eliminated all GF ($600.0).
[25] The FY00 budget changed AVTEC Program Receipts authority to Statutory Designated Program Receipts and added the intent that AVTEC raise its tuition rates to meet the new receipts target. In FY01, the name was again changed to Receipt Supported Services.

As Table 30 and the accompanying footnotes show, there has been considerable fluctuation in support for the technical centers. Although both enjoy higher state budgets today than in FY97, it is interesting to note the sources of this support. In both cases, regular GF funding has declined. In the case of Kotzebue's ATC, it has disappeared. Instead, funding has been increasingly shifted to three sources: grants under the program established by in 2000 by SB 289, WIA funds and, in the case of AVTEC, to tuition (Designated Receipts).

4. Other Adult and Youth Funding

The other major sources of workforce development funding are federal funding through WIA and the Denali Commission and state dollars under STEP. WIA replaced the JTPA funding that was available in 1997. The Denali Commission Training Fund is a new entity on the workforce development scene.

The following table gives amounts available under these funding sources for recent years.

Table 32
WIA/STEP / Denali Commission Financials
State Fiscal Year 2002 thru 2004

		State FY02	State FY03	State FY04[26]
	Adult	3,112,412	4,901,180	2,718,071
	Dislocated Worker	3,761,541	7,357,988	5,932,438
	Youth	1,475,646	4,249,537	3,205,149
WIA	Local Admin 10%	1,213,093	1,295,497	1,007,096
	Statewide Admin 5%	641,071	611,783	1,018,210
	Statewide Activities 10%	984,606	2,027,839	1,731,147
	Rapid Response	273,939	1,460,931	1,605,266
	subtotal	11,462,308	21,904,755	17,217,377
	Program	3,883,784	3,730,755	4,340,100
STEP	Admin	913,147	820,354	280,537
	subtotal	4,796,931	4,551,109	4,620,637
	Program	2,033,430	3,120,910	3,495,934
Denali	Admin	331,664	104,233	204,000
	subtotal	2,365,094	3,225,143	3,699,934
	TOTAL	18,624,333	29,681,007	25,537,948

When WIA and STEP funding for FY04 is compared with FY97 amounts, it can be seen that these has been a considerable increase in federal support and a more modest increase in STEP funding.

[26] Includes carry forward

Table 33
Adult and Youth Program Comparisons
FY97 – FY04

Program	FY97	FY04	% change
JTPA/WIA	$8,384,900	$17,217,377	105.3%
STEP	$3,333,600	$4,620,637	38.6%

D. Program Performance

The core indicator tracking system which is required for both Perkins and WIA training programs is beginning to yield useful and significant information for both program operators and state decision makers. The following tables look at how well Alaska programs have meet or exceeded the expected level of attainment of various indicators.

Information is reported here for the following indicators for those exiting vocational programs:

Secondary Programs	Adult Programs
1A. Academic Achievement: % who had earned 4 credits of English and 2 of math 1.B. Vocational Achievement: % who had met established industry-validated career and technical skill standards 2. Diploma: % who had earned their HS diploma 3. Placement and Retention: % who left school in the previous year and subsequently A. enrolled in postsecondary education and/or B. were employed 4.A. Non-traditional Participants: % enrolled in occupational programs non-traditional for their gender 4.B. Non-traditional Participants: % completing occupational programs non-traditional for their gender	Number of Exiters • Placement: % of exiters who were employed 7 – 12 months after exiting • Earnings: Median total earnings of exiters

1. Secondary Program Performance

Secondary program performance has been tracked over the past several years on the four core indicators and is reported on the following table. On the table, "Adjusted Level of Performance" is the benchmark that programs are expected to meet or exceed. Bold figures indicate those core indicators where state performance reached or topped the expected level.

Table 34
Two-Year Comparison of Attainment of Core Indicators - Secondary

Core Indicator	Population	Number of Students in Numerator	Number of Students in Denominator	Adjusted Level of Performance	Actual Level of Performance	Number of Students in Numerator	Number of Students in Denominator	Adjusted Level of Performance	Actual Level
		2000 2001				2001 2002			
IA	GRAND TOTAL	2,950	4,077	66.33%	**72.36%**	2,989		66.83%	**72.62%**
	Male	1,649	2,381		69.26%	1,634	2,318		70.49%
	Female	1,301	1,696		76.71%	1,355	1,798		75.36%
1B	GRAND TOTAL		4,077	67.63%	63.97%	2,646	4,116	68.13%	64.29%
	Male	1,477			62.03%		2,318		61.99%
	Female	1,131	1,696		66.69%	1,209	1,798		67.24%
2 Total	GRAND TOTAL	3,217	4,077	71.96%	**78.91%**	3,250	4,116	72.46%	
	Male	1,849	2,381		77.66%	1,780	2,318		76.79%
	Female	1,368	1,696		80.66%	1,470	1,798		81.76%
3 Total	GRAND TOTAL	3,358	3,895	94.62%	86.21%		3,434	90.00%	79.50%
	Male	1,829	2,183		83.78%	1,502	1,956		76.79%
	Female	1,529	1,712		89.31%	1,228	1,478		83.09%
3A (education)	GRAND TOTAL	1,049	3,895	94.62%	26.93%	1,490	3,434		43.39%
	Male	520			23.82%	763	1,956		39.01%
	Female	529	1,712		30.90%	727			49.19%
3B (employment)	GRAND TOTAL	2,253	3,895		57.84%	2,238	3,434		65.17%
		1,268	2,183		58.09%	1,251	1,956		63.96%
	Female	985	1,712		57.54%		1,478		66.78%
4A	GRAND TOTAL	3,890	11,919	30.73%	**32.64%**	3,878	11,091	31.23%	**34.97%**
	Male	2,588	7,033		36.80%	2,585	6,572		39.33%
	Female	1,302	4,886			1,293			28.61%
4B	GRAND TOTAL	1,225	5,505	14.77%	**22.25%**	1,197	4,021		29.77%
	Male	629			18.30%	632	2,540		
	Female	596	2,067		28.83%	565	1,481		38.15%

As can be seen from the prior table, secondary programs meet or exceeded the expected level of attainment in all indicators except Core Indicator 3, which deals with placement and retention. Part of the explanation of this lower achievement can be found in the data sources. Many Alaskan secondary graduates go to the Lower 48 for further education or employment. If they take out Alaska student loans, they are included in the placement data. If they are attending a school outside Alaska without this assistance, they may not be counted. And, since the follow-up on employment is primarily through Alaska wage records, if a high school graduate goes out of Alaska to work, he/she is not likely to be counted. As the Alaska DLWD is able to match students with additional national data sources, the placement figures for secondary vocational completers should improve.

3. University of Alaska Performance

One measure of university performance is the extent to which its programs and degrees meet the economic needs of the state. The prior status report made the following recommendation:

> **1997 Recommendation:** The Alaska Human Resources Investment Council (AHRIC), as the entity charged with comprehensive workforce development, should continue to identify areas where training is needed, inform training institutions of this need and help secure the necessary resources.

The AWIB now establishes a priority list of highest need occupational clusters and informs the university system and other training institutions of these high need areas. Currently, there are seven areas slated for focused attention: Health Care, Construction, Information Technology, Transportation, Seafood and Education.

The following table shows the number of degrees (one year certificates through master's degree) awarded in Alaska Department of Labor high-demand occupational areas as well as enrollment. The bolded areas of the table highlight degrees in the occupation areas identified on the AWIB priority list. As can be seen, all of the AWIB priority list of highest-need clusters are represented in these figures, with the exception of Seafood. However, a new program at the Ketchikan campus of UAS should raise these numbers in the future.

Table 35
UA Degrees Awarded and
Enrollment Headcount by High-Demand Job Area[27]

	Number of Degrees Awarded							Number Enrolled Fall	
UA Anchorage	FY99	FYOO	FY01	FY0	98	99	00	01	02
Air Transportation	**28**	**32**	**29**	**34**	**164**	**154**	**186**	**259**	**293**
Business Services	69	60	75	50	469	414	353	392	385
Engineering	75	44	43	48	317	279	250	280	308
Finance, Insurance, and Real Estal	61	87	76	74	417	396	368	338	379
Health	**274**	**259**	**259**	**306**	**1326**	**1217**	**1332**	**1396**	**1573**
Information Technology	**90**	**87**	**72**	**90**	**642**	**585**	**585**	**587**	**617**
Management	89	91	64	65	405	396	375	433	491
Natural Resources	32	27	22	28	159	122	133	144	138
Process Technology	9	9	8	54	40	34	92	192	159
Teacher Education	**251**	**204**	**155**	**191**	**1106**	**893**	**733**	**668**	**839**
Transportation	**17**	**5**	**7**	**4**	**68**	**63**	**48**	**46**	**14**
UA Fairbanks									
Air Transportation	16	14	14	10	25	25	16	24	35
Business Services	**35**	**49**	**83**	**45**	**123**	**123**	**130**	**117**	**129**
Engineering	68	70	57	66	383	335	329	375	396
Finance, Insurance, and Real Estat	20	16	19	13	93	93	91	89	71
Health	**78**	**120**	**77**	**126**	**319**	**261**	**302**	**327**	**357**
Information Technology	**10**	**47**	**50**	**32**	**163**	**248**	**281**	**286**	**273**
Management	49	42	59	51	252	239	247	233	240
Natural Resources	51	58	39	56	334	326	297	292	318
Process Technology	1		1	12	2	2		24	48
Teacher Education	**92**	**81**	**61**	**67**	**487**	**412**	**330**	**350**	**460**
UA Southeast									
Business Services	20	33	21	17	94	99	78	96	93
Finance, Insurance, and Real Estat	1				188	173	163	163	138
Health	**12**	**6**	**5**	**3**	**19**	**25**	**35**	**36**	**47**
Information Technology	**3**	**7**	**7**	**8**	**36**	**46**	**60**	**72**	**61**
Management	28	32	39	35	30	38	41	50	57
Natural Resources	4	1	1	5	29	30	39	39	48
Process Technology	9	7	5	2	15	12	10	6	10
Teacher Education	**42**	**67**	**41**	**57**	**207**	**135**	**155**	**143**	**215**
Transportation								**1**	

Table 34 shows considerable degree activity in high need areas. In FY02 the University of Alaska conferred 1,382 degrees in high demand job areas as defined by the Alaska DLWD.

4. Other Postsecondary Performance

Information on performance is collected from other postsecondary institutions, including private institutions that wish to eligible for training dollars under WIA. This information

[27] The number of students in a High-Demand Job Area may not match those that were previously reported in prior publications of UA in Review due to a change in the programs included in each Area in Fall 2002. For more information on high demand degree program enrollment and degrees awarded by campus, see hftp://www.alaska.edu/oir/uarO3ttbl2O5b.pdf.

is reported in the annual Training Program Performance reports issues by the Alaska DLWD. Summary information from these reports is displayed in the following table.

Table 36
Core Indicator Achievement
For Selected Training Programs and Providers[28]

Number Exiting	1998	1999	2000	2001
AK Technical Center	226	197	109	173
AVTEC-Seward	1,204	1,199	1,070	1,061
UA Voc. Ed.	6,779	5,933	5,456	5,537
STEP	1,335	1,224	1,354	1,209
NAFTA/TRA	54	64	158	144
Work Search	1,166	1,443	1,260	850

% of program exiters employeed 7-12 month after				
	1998	1999	2000	2001
AK Technical Center	75.5%	80.2%	81.7%	69.4%
AVTEC-Seward	73.9%	68.7%	73.7%	76.9%
UA Voc. Ed.	61.3%	61.3%	62.8%	65.2%
STEP	71.8%	76.1%	75.6%	84.8%
NAFTA/TRA	40.7%	70.3%	63.9%	64.6%
Work Search	59.9%	61.1%	65.2%	63.5%

Median Total Earnings	1998	1999	2000	2001
AK Technical Center	$ 9,039	$ 8,972	$ 8,610	$ 18,117
AVTEC-Seward	$ 13,254	$ 11,806	$ 13,612	$ 16,456
UA Voc. Ed.	$ 9,454	$ 9,883	$ 10,615	$ 11,099
STEP	$ 7,889	$ 9,103	$ 9,144	$ 11,963
NAFTA/TRA	$ 13,870	$ 12,705	$ 24,823	$ 19,509
Work Search	$ 3,774	$ 4,050	$ 4,123	$ 5,086

The above table shows that the included training programs are having a substantial degree of success. Median earnings for exiters have showed a steady growth for all programs except NAFTA/TRA and all programs except ATC at Kotzebue show rising placement rates. Most programs show a decline in the number of exiters. Overall, the impression gained is that less Alaskans are exiting (and therefore entering) workforce development programs, but of those who do, a higher percentage is being placed and they earn high wages than before.

[28] Taken from Training Program Perfomance reports

4. Tech Prep

One of the desired outcomes of secondary vocational education is the successful transition of students from one level of education to the next. This transition is fostered through collaborative efforts between secondary schools and a variety of postsecondary training opportunities, generally documented by an articulation agreement.

Although tech prep enrollment figures as reported to the Alaska DEED may not be totally accurate, as indicated above, there appears to be considerable collaboration between local districts and other entities. A listing of articulation agreements compiled by DEED indicates that a total 24 school districts have such agreements.

On the postsecondary side of these agreements are 9 campuses of the university system, Charter College, Job Corps, Alaska Works, Association of General Contractors, Operating Engineers and Providence Hospital. Mat-Su district is the most active in seeking articulation agreements and reported that 410 students had been involved in programs covered by such agreements in FY03. The Career and Technical College at UAA is the most active on the postsecondary side, reporting an unduplicated count of 223 students in the same timeframe. At the time of this writing, UAA has agreements with the Anchorage, Delta/Greely, Galena and Mat Su school districts, AVTEC, the Career Academy and Springs Creek Correctional Institution. A complete list of all UAA agreements can be found by accessing the *June 2003 Tech Prep Report* at the CTC website <www.uaa.alaska.edu/techprep/info.html>

Tech Prep and articulation agreements are moving out from career and vocational programs into other colleges, such as business. As the above list indicates, they are also involving partners other than school districts. The career and vocational education deans and community campus directors of the UA system have been meeting on ways to develop and standardize agreements with school districts. A common template for these agreements is under construction, which should make the process easier and thus encourage further articulation.

5. Future Employment Needs

An important goal of workforce development programs is to meet future employment needs. A review of employment projections to the year 2010 has some rather disturbing implications. Most of Alaska's future jobs (2010) will require one year or less of on the job training. Only 10.4 percent will require two years or less of vocational training. About 22 percent will require a bachelor's degree or higher. Of the ten occupations projected by the Alaska DLWD to have the largest numeric increases, only three—registered nurses, nursing aides and dental assistants—require postsecondary training.

The situation is better when one looks at the 10 fastest growing occupations, all of which require some training and all but one of which are in the health field (the non-health area is computer applications). The 10 "Best Bet" occupations, those with high growth and

relatively high wages, that require an associate degree or some postsecondary training are again primarily in the health.

Although the current system has increasing opportunities for training in some health areas, particularly nursing and nursing assistant, there is no doubt much room for expansion. Several components of the University of Alaska are addressing this issue and the following programs are under development or expansion in rural Alaska:

College of Rural Alaska

Allied Health

- Health Care Reimbursement Certificate
- Community Health Aide Practitioner Certificate/AAS Degree
- Phlebotomy Certificate with UAA in Aniak
- Certified Nursing Assistant

Behavioral Health

- Rural Human Services Certificate
- Human Services AAS Degree
- Social Work Bachelors Degree

Nursing with UAA

- LPN--Bethel
- Nursing AAS Degree--Bethel

Health Administration

- Rural Development Bachelors and Masters Degrees

University of Alaska Southeast

Allied Health

- Health Information Management Certificate and AAS Degree
- Certified Nursing Assistant
- Community Wellness Certificate

UAA, which has the primarily health sciences education mission for the system also continues to expand it programming, both in the Anchorage bowl area and, increasingly, via distance to other areas of the state.

However, expansion of opportunities in health science education is not unlimited. The largest constraint on almost all training in the health sector is finding adequate clinical and practicum locations. While this is especially true in rural Alaska, programs in urban areas, including Anchorage, are pushing the limits of available sites.

A final goal for Alaska's workforce development programs has been the replacement of non-resident workers. The occupations with the highest percentage of non-resident workers that also require some training are shown in the following table.

Table 37
Non-residents as a Percentage
Of the Workforce in Occupations
Requiring Some Postsecondary Training

Occupation	Resident	Nonresident		Resident	Nonresident	
	Number of Workers	Number of Workers	Percent	Earnings	Earnings	Percent
Commercial Pilots	482	369	43.4	$24,004,080	$11,823,329	33
Airline Pilots, Copilots, and Flight Engineers	1,013	664	39.6	$61,092,375	$44,332,313	42.1
Welders, Cutters, Solderers, and Brazers	693	401	36.7	$28,630,733	$10,262,196	26.4
Construction and Related Workers, All Other	752	361	32.4	$10,724,099	$2,224,543	17.2
Roustabouts, Oil and Gas	1,077	449	29.4	$47,530,814	$18,313,109	27.8
Cooks, Restaurant	1,789	717	28.6	$27,776,703	$5,573,457	16.7
Food Preparation Workers	1,208	390	24.4	$10,757,351	$1,878,400	14.9
Plumbers, Pipefitters, and Steamfitters	1,253	354	22	$53,163,747	$7,388,006	12.2
Electricians	1,759	481	21.5	$76,282,053	$14,780,714	16.2
Food Preparation/Serving, Including Fast Food	5,658	1,489	20.8	$33,282,235	$5,042,487	13.2
Construction Equipment Operators	2,278	587	20.5	$102,&56,639	$21,261,397	17.1
Food Preparation Workers	1,875	473	20.1	$26,041,503	$3,317,182	11.3
Registered Nurses	2,785	670	19.4	$122,845,870	$13,306,008	9.8
Child Care Workers	1,734	409	19.1	$14,679,466	$1,469,993	9.1
Carpenters	3,810	801	17.4	$96,054,538	$10,128,404	9.5
Maintenance and Repair Workers, General	2,371	460	16.2	$66,453,141	$7,736,024	10.4
Truck Drivers, Heavy and Tractor-Trailer	2,151	391	15.4	$81,078,809	$8,832,225	9.8
Office Clerks, General	5,905	928	13.6	$107,996,468	$10,170,449	8.6
Receptionists and Information Clerks	2,778	409	12.8	$43,882,430	$2,802,511	6

As can be seen from the table, Alaska's training institutions do provide training in all of these areas.

Section III – The Landscape of the Future

Having looked at the present vocational education landscape and compared it to the extent possible with that of six years ago, what can be surmised about the landscape of the future?

A useful way of approaching this analysis is to return again to the four forces described in Section I and to see what effect these forces can be expected to have in the future with regard to programs, enrollment, funding and outcomes.

A. Quality and Standards

It appears highly unlikely that the standards and school quality movement will do anything but gain further momentum, at least in the near future. Any reauthorization of Perkins III will increase the focus on academic skill achievement, perhaps at the expense of vocational programming at the secondary level. Many see the Perkins reauthorization as a way for the federal government to channel school improvement funds to the secondary level, which was largely overlooked in the No Child Left Behind legislation.

While it has long been possible to provide vocational and technical programs at the high school level that meet rigorous academic standards, this is by no means the universal case. And the perception at the U.S. Department is that

> a completely new approach [to vocational education] is necessary—one that improves high school academic preparation for all students AND that draws upon the strengths of community colleges collaborating with high schools to create high-quality technical options (emphasis in text).[29]

Although response to the proposed Secondary and Technical Education Act from the vocational educational community and many members of Congress has been negative, the emphasis on quality, standards and secondary/postsecondary alignment will no doubt be a part any reauthorization.

Any increased emphasis on standards is likely to strengthen the current movement in Alaska for education/industry partnerships. One core indicator in Perkins III is the

> percentage of Secondary CTE Concentrators who left school and have met industry-validated career and technical skill standards as evidenced by earning credit for courses that address those standards.[30]

Alaska DEED currently requires districts to align curriculum with industry standards, as shown in the example for Carpentry in the appendices to this report. Where current industry standards are not available, they will no doubt be required. Many industries

[29] A Blueprint for Preparing America's Future, an overview of the U.D. Department of Education of its proposed Secondary and Technical Excellence Act of 2003.
[30] Perkins III definition for Core Indicator 1B.

have certificates for completion of standards. In the future, it is not unlikely that the core indicator will require completion of this certificate—not just a course—as proof of skill attainment. Such a requirement would be the ultimate in industry validation of skill attainment. Even if new legislation does not go to this extreme, it is likely to strengthen this indicator. A suggestion in a recent report by the influential American Youth Policy Forum for "technical and end-of-course CTE assessments, which [would be] aligned with NCLB"[31] seems quite possible to be implemented.

The attention to academic skills is a second spur to increasing business and industry involvement in programs. Union officials as well as employers in Alaska have long demanded attention to basic and "soft" skills as well as technical abilities in workforce development. As Alaska moves to include more academic preparation in vocational programs, it seems probable that employers and unions would be involved assure that the appropriate skills are being emphasized.

While the impact of the national standards movement has been and will continue to be generally beneficial to Alaskan vocational education in terms of improving program quality, any move to shift vocational programming from secondary to postsecondary could have a significant negative impact, particularly in rural Alaska where local community campuses are limited to hub villages. Even with the expansion of distance delivery, many rural students would lose access to essential job training and work readiness skill development opportunities.

Some vocational educators fear that a Perkins reauthorization in the spirit of NCLB could also include requirements for "highly qualified" teachers. Although vocational education is currently exempt from the "highly qualified teacher" standards (which require a teacher to hold an undergraduate major or better in the subject[s] he/she teachers), many of the secondary vocational education directors interviewed for this report cited two concerns. First, NCLB has already unintentionally affected vocational programs, particularly in the rural areas by drawing teachers out of vocational into regular education programs. Second, it is becoming increasingly difficult to find qualified vocational education teachers, again particularly in rural Alaska.

A brief review of endorsement areas for teachers currently teaching vocational education gives some credence to these fears concerning "highly qualified" faculty. For example, of the 140 teachers currently teaching business education programs, only 57 or 40.7 percent hold an endorsement in this area. The remainder are endorsed in various academic areas and could easily be transferred out of vocational courses to help a district meet the "highly qualified" requirement in other subjects. Or, put another way, if a similar requirement is put into a Perkins reauthorization, 59.3 percent of the current business education teachers would not meet the requirement.

A similar situation prevails in other vocational cluster areas, such as Architecture and Construction (which now includes most of the traditional Industrial Arts courses) and

[31] American Youth Policy Forum, Rigor and Relevance: A New Vision for Career and Technical Education, p. 13

Human Services (which includes what remains of traditional Home Economics). Of the current 292 Architecture/Construction teachers, 59.2 percent hold their primary endorsement in other academic areas. Similarly, 62 percent of those teaching Human Services are endorsed in other areas.

A further concern is the aging of the teacher population. District vocational education directors almost universally fear that retiring vocational education teachers will be replaced—if at all—with teachers in other academic areas, particularly in rural Alaska. This fear would become an almost absolute certainty if vocational programs are required to meet "highly qualified" thresholds.

UAA Career and Technical College is revitalizing its program to train vocational education teachers, which can help to ameliorate this situation, but even at its most active in the past, the program never prepared more than a fraction of the state's vocational education teachers.

B. Performance Measures

Performance measurement is the logical outgrowth of the standards movement and, like its parent, is likely to gain in strength in the coming years. Perkins III established a baseline for performance reporting in academic and vocational skill attainment and post-program placement. These measures will no doubt continue in any reauthorization. WIA is also up for reauthorization. Information relative to a bi-partisan effort for a new bill indicates a similar desire for "improving performance accountability."[32] On the state level, Governor Murkowski, in a cover letter to school superintendents concerning increased funding for schools under the 2003 Senate Bill 202, ended by stating that "the Murkowski administration pledges to continue to make financial resources available, but we need to hold recipients accountable for excellent educational results."[33]

Again, performance measures overall have had and will continue to have some very positive effects on Alaska's workforce development programs. There are, however, several trends that—if left unchecked—could have substantial negative impact.

The first is the apparent trend in rural Alaska for districts to shift faculty and resources out of vocational education into the academic program as a result of the high school exit exam and, more recently, NCLB. While no one disputes the fact that all Alaskan schools need to upgrade academic achievement, it does not necessarily follow that this can be done only through beefing up academic courses. In fact, some of the most successful small secondary school programs have used hands-on skill building—including traditional subsistence and cultural skills as well as vocational skills—to introduce and reinforce academic skills. To the extent that performance measurement is causing

[32] The Workforce Alliance, Analysis of Senate HELP Committee's "Discussion Draft" for Reauthorization of The Workforce Investment Act (WIA), p. 3

[33] Letter from Governor Murkowski to Alaska School superintendents re SB 202, June 6, 2003, p. 2

districts to turn away from alternative ways of instruction, the trends will be for ever-decreasing enrollments in secondary vocational education.

A second potential problem with performance measures which applies primarily to postsecondary and adult programs is that they can create certain disincentives. For example, if current performance measures are used as the sole criteria for further funding, programs serving those with greatest barriers to employment will be penalized, both because their placement rates may be relatively slim and because initial wages may be relatively low. Additionally, these programs often have low enrollments so that one or two students can skew results, which are reported as percentages. While it is probably too early to determine if measures have had this effect in Alaska, several persons interviewed for this report felt that programs that were successfully moving disadvantaged students—for example, welfare recipients—into the workforce were in danger of getting short shrift because of their post-employment earnings figures. As one respondent commented,

> We tell our students to look not just at the job but at the career that first job can lead to. But we aren't evaluated that way. We're only evaluated on that first job.[34]

If the above two trends do exist and persist, they could substantial affect the enrollment in both secondary and postsecondary training programs. And, those affected could be those most in need of these programs.

A further negative effect of performance measures is what happens to those individuals who cannot meet performance standards. This issue is rapidly approaching in Alaska as some students fail the HSGQE and thus fail to receive a high school diploma. The problem is further exacerbated if the high stakes exam and the resource requirements of NCLB have crowded out vocational education at the secondary level. This raises the specter of a cadre of high school exiters who have neither the academic nor work skill to transition to any meaningful role in society.

The focus on future work force needs will continue to be strong. However, if too much emphasis is placed on meeting future workforce needs as a program performance measure, the result could be to greatly restrict the scope of vocational programs to a more narrow focus on health professions. Again, no one underplays the need for greatly increased effort in this area, but other occupational clusters must be fostered as well. And, as mentioned above, the system's ability to meet all of the health sectors training needs is severely constrained by lack of adequate clinical sites.

State policy-level concern over the size of the nonresident workforce in Alaska will no doubt continue into the future and could conceivable be established as a performance measure for workforce development efforts. The major problem with this trend, should it develop, is that training organizations in Alaska have been and continue to provide training in all of the occupations with the highest number of out-of-state workers as

[34] Interview respondent. Non attributed because all respondents were promised anonymity.

shown in Table 37. If through the years this training has not reduced or eliminated the non-resident work force, it is because factors other than training are at work. While Alaska Hire efforts should continue, rather than attempting use workforce development as a tool to reduce out of state hire, a more fruitful public policy might be to tax non-resident earnings and use the proceeds to provide a stable funding base for the university and technical center training programs that are threatened by declining state support.

C. Consolidation and Coordination

A third force that appears to be gaining in strength is the push for consolidation and coordination of programs. For example, the Senate draft of a WAI reauthorization bill mandates TANF as a one-stop partner, further consolidating job search and training functions at the local level. At the state level, the Commonwealth study on workforce development recommended that AWIB be transferred from the Alaska DLWD back to the Governor's Office so that it could provide greater oversight over all workforce development programs, including those such as TANF which are administered by the Department of Health and Human Services.

While it is difficult to quarrel with the concept of consolidation/coordination, it, too, can have a negative side. For example, as the Workforce Alliance's analysis of the Senate WIA reauthorization draft points out, consolidation can "give states too much authority over local service strategies", as stronger governance structures dictate not only policy and desired end results but also operating strategies to accomplish these results. In some ways, this is a similar concern to that raised by performance measures above: a concern not with the end but with the means.

This concern is particularly relevant to Alaska, where vast regional differences require a great deal of flexibility in designing programs and delivery systems. To the extent that program consolidation restricts this creative and necessary flexibility, it will have a chilling effect on workforce development programs.

Consolidation raises a second concern. With program consolidation often comes funding consolidation, as has been seen over the years with the federal government's penchant for turning categorical programs into block grants. Although the original intent is to make funds more flexible at the state or local levels, the often unintended result is to crowd out some of the previously-funded activity. This result is much more likely if, as almost always seems to be the case, block funding is reduced over time.

This appears to have been the unintended effect on secondary vocational education programs of the 1998 change in the Alaska Foundation Program. Although expenditure information for such programs is not available after FY98, several data elements indicate that this crowding out effect is occurring. One of these data points is the increase in special education expenditures, which have grown at about twice the rate of regular instructional expenditures. Since vocational education programs compete with special education programs for a share of the block funding and since the size of the total pie has not changed substantially, it is logical to conclude that vocational expenditures are

shrinking. This is borne out by the second set of data which indicate a decline in the percentage of high school population taking vocational offerings. This decline is even more precipitous if the figures are adjusted to correct over-reporting.

A final consolidation possibility is the consideration in Alaska of regional vocational technical centers. This discussion is part of a larger discussion on rural education. After 25 years experience with the small, rural high schools mandated by the settlement of the Molly Hootch case, many Alaskans, including Alaska Native leaders, are reconsidering the idea of regional centers. The conversation is gaining some momentum because of the interest of Senator Stevens.

The impact of such centers on expanding vocational education programs could be considerable in that they could offer sufficient economies of scale to allow for expanded programming. But, there is also the inevitable downside. One concern of some vocational educators is that that the regional center concept is now being steered away from vocational education in favor of academics. This shift is occurring as the state struggles to meet the Student Choice and Supplemental services mandated under NCLB for students of schools who do not make adequate yearly progress. A position paper from the Alaska DEED on the effects of NCLB outlines a plan to establish six Regional Learning Centers that would allow students to focus on special skills, "for example reading, writing, math, vocational and workforce development and other content areas."[35] Although vocational education is mentioned, it is clear from the tenor of the report that the major focus would be to bring student academic achievement up to mandated levels.

An even bigger concern is that once centers are established, how will they be supported? Alaska is littered with decaying structures that once housed ambitious programs. Tuition alone could never support such centers, yet the state's record of supporting its current centers is not stellar. A very detrimental, unanticipated outcome of the movement toward regionalization could be to kill all secondary vocational education programs and replace them with poorly-supported regional centers.

D. Cooperation

The final force which will continue to operate in the future allows a sigh of relief. The movement for continued cooperation and coordination of existing vocational education efforts is one that can be embraced with almost no reservation.

Several current efforts at cooperation/collaboration are likely to continue, with beneficial effects on vocational education. The first is the growing efforts to utilize distance and distributed education technologies for vocational program delivery. Examples are the correspondence learning opportunities provided through AVTEC, on-line and audio programs delivered by the University of Alaska and short distance/on-site programs such as Chugach School District's Alaska House and Galena's Project ED.

[35] Alaska DEED, Discussion Points on No Child Left Behind, January, 2003, p. 4

Distance programs require a high degree of cooperation among receiving and sending institutions and increasingly are using resources from several institutions. Examples are the UA health programs cited above. All of these programs utilize some form of distance technology to reach rural Alaska and many of them require the use of faculty from all three MAUs. Another good example is the Early Childhood Education Associate Degree program that is delivered via distance throughout Alaska using faculty located at four different UA campuses. Finally, the Microcomputer Support Specialist Program is offered at all campuses, using a combination of on-site and on-line resources. Although distance delivery can lead to more efficient utilization of existing resources, it is not without cost. As university funding is cut back, the system will become less able maintain the significant infrastructure that is needed to support distance learning.

Distance technology is also an effective way of increasing collaboration between high schools and university programs. Several of the rural health training programs referenced above build on career pathways projects with secondary schools. This appears to be a particularly effective way of increasing the scope and quality of vocational education opportunities at rural high schools by expanding Tech Prep types of programs to areas that do not have access to a local campus.

This potential points to another trend, that of tech prep and other articulation agreements between institutions. Current information suggests that more districts and more postsecondary institutions are involved in these programs today than in 1997. And, it is likely that even if the Secondary and Technical Excellence Act does not pass as proposed, the Perkins reauthorization will stress tighter links between high schools and community colleges. This could strengthen those secondary programs that have immediate access to a local campus, as has been the case in the past with Sitka and Mat-Su, both of which have extensive agreements with their local postsecondary institutions. But, as mentioned above, this could have a detrimental effect on those high schools that do not have access to a community campus unless distance delivery continues to grow.

Based on all of the above, what can be assumed about the vocational education landscape of the future? The following description reflects the author's views, formed by available information and data.

Vocational Education of the Future

First, the system will continue to be standards driven. This should increase the involvement of business and industry both in developing the standards and measuring student achievement of these standards. Standards will include basic and soft skills as well as vocational and technical skills. However, unless vocational educators are seen as significantly raising the academic rigor of their programs, it is likely that vocational education will be marginalized.

Program outcomes will be increasingly subject to measure and comparison with benchmarks. And, in the future, funding decisions will be tied to performance. This trend will strengthen some vocational programs and will eliminate others. However,

some of the programs eliminated may be those for which there is the greatest need in terms of transitioning people into the workforce. This could be particularly true for high school leavers who fail the graduation qualifying exam.

Those who do obtain a high school diploma will have met rigorous standards for communication and computational skills, which should auger increased success in more rigorous and complex post-secondary vocational programs. However, as the skill levels of the potential workforce increase, many will find themselves underemployed in an economy where two-thirds of the jobs require little more than a year's on-the-job training.

Pressures for increasing performance on NCLB and the high school qualifying exam will consume ever more resources at the local level, as the punitive aspects of non-performance come into play, both in terms of loss of students at low achieving schools and lifetime stigma for those students unable to clear the achievement bar. Since both NCLB and the state's high stakes testing includes students with special needs, special education expenditures will continue to rise, leaving fewer and fewer funds for vocational programs. Demands for "highly qualified' teachers both under NCLB and potentially under a reauthorized Perkins will put additional strains on already limited vocational education staff at the school district level. Other training institutions will find it increasingly difficult to import trained vocational educators in a highly competitive environment.

At the adult level, concern for future employment needs and replacement of out-of-state workers will continue to influence workforce development. These pressures are likely to increase if the gas pipeline materializes. However, these pressures could lead to a mis-allocation of training dollars if other market forces are not taken into account.

Program direction and administration will continue to be consolidated, particularly at the adult level as more programs are brought into the one stop system and under the purview of the Alaska Workforce Investment Board. While this will provide more opportunities for streamlining services and realizing savings through shared staff and facilities, it may also hamper flexibility of service delivery, particularly in rural Alaska.

Cooperation and collaboration among agencies and institutions will expand both as a response to declining resources at the state level and of federal initiatives. Secondary/postsecondary articulation will become more routine under a reauthorized Perkins as secondary schools seek to develop more rigorous vocational programs. This will place an increased demand for distance educational and distributed learning. In response to quality demands, some form of regional learning centers will emerge, perhaps as an outgrowth of the university's community campuses, perhaps as creatures of the K-12 system. In either case, there could be a quickened movement to develop a truly seamless K-14 or K-16 system.

Section IV: Do We Want to Go There?

As Scrooge asked of the Ghost of Christmas Future, "Are these the shadows of the things that Will be, or are they shadows of things that May be, only?" Obviously, none of the above description is inevitable. Although many of the forces described in this report emanate from Washington, Alaskan policy makers and educators can influence how these forces play out in our state. In reading over the 1997 report in preparation for this study, the author was pleasantly surprised at how many of the recommendations had come to pass, not as a result of the report but as a result of influences at work that had been identified in the report. In the hopes of a similar result, the author makes the following recommendations.

A. Quality and Standards

- The 1997 report recommended that vocational educators "embrace school reform". The recommendation now is that the school reform and standards movement "embrace vocational education". Vocational educators do know how to develop rigorous programs that can meet high academic standards. These programs can be very successful alternatives to the traditional academic program in helping students achieve standards for the High School Graduation Qualifying Exam (HSGQE). But to fulfill this promise, vocational educators need resources. The current funding system which pits vocational education against other categorical programs such as special education should be reviewed.

- The state should continue to press for relief from federal mandates, such as the "highly qualified teacher" mandates that impose an impossible hardship on Alaska school districts.

- In order to improve and maintain program quality, The University of Alaska and the state's existing technical centers need a stable level of support. Programs begun under SB 289 funding which show promising results should be continued. Other consistent sources of support should be secured and maintained.

B. Performance Measures

- Performance measurement must take into account hard-to-serve populations and the problem of small samples.

- Those setting performance levels must recognize the cost of non-achievement on individuals. It is not enough to raise the bar and then walk away from those who fail to clear it.

C. Consolidation and Coordination

- Policy makers need to preserve a level of flexibility and attention to local circumstances as they move for greater consolidation of programs. Desired ends

should be specified but means of accomplishing these ends should acknowledge the severe contrasts existing among the state's regions.

- Any plans to develop new institutions—such as regional vocational or learning centers—should 1) consider the long term operating needs of such centers and 2) assure that resources are not bled away from existing institutions to create new ones.

D. Cooperation and Collaboration

- To secure the resources that it needs, vocational education must have the support of business and industry. Current career consortia and other school business partnerships should be expanded to assist in developing standards, evaluating student performance and providing work experiences. Perhaps an even more important role, however, is to help communicate the benefits of rigorous career and technical education to the long term economic health of Alaska.

- Increased use of distance education methodologies in delivering high-quality vocational education should be encouraged. But policy makers should recognize and fund the costs of such programs.

Readers will no doubt identify other actions that could construct the landscape they wish to see. If this report has contributed to the debate on the contours of this landscape, it will have fulfilled its purpose.